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UNIVERSITY OF ALBERTA

The Relationship between Residential Segregation and Ethnic Assimilation: A Case Study of the Chinese in Edmonton

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by

Qing Jane Fang

A thesis
submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of
Master of Arts

Department of Geography

Edmonton, Alberta
Spring, 1994

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Qing Jane Fang
17915-98A AVE.
Edmonton, Alberta
T5T 3L3

Date: Jan. 26, 1994

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **The Relationship between Residential Segregation and Ethnic Assimilation: A Case Study of the Chinese in Edmonton** submitted by **Qing Jane Fang** in partial fulfillment of the requirements for the degree of Master of Arts.

K.J. Fairbairn, Dept. of Geography
Supervisor

D.B. Johnson, Dept. of Geography

H. Krahn, Dept. of Sociology

Date: Jan. 26, 1994

Abstract

This thesis examines the relationship between ethnic residential segregation and assimilation by establishing the extent to which ethnic residential dispersal is associated with diminished ethnic identity. The Chinese in Edmonton is the subject population. It is divided into two groups: a Chinatown group and a suburban group. The major purpose of the study is to investigate why the two groups choose the present dwelling places, what socio-demographic factors cause their different residential locational choices and whether or not the two groups maintained same degree of ethnic identity.

A self-administered questionnaire survey was conducted between May and July, 1992 in Edmonton. The sample population consisted of first generation Chinese immigrants, mostly from Hong Kong and China. The respondents were the major wage-earners of the sampled households.

The study showed that both groups try to adjust their housing needs within their limited financial resources. The study also showed that the Chinatown group has a tendency to seek ethnic propinquity while the suburban group does not. The reasons for the two groups' different residential locational choices is drawn from an examination of their socio-demographic profiles. The Chinatown group are old, retired, quite old on arrival in Canada and with hardly any knowledge of English; whereas the suburban group are younger and in the child-bearing and child-rearing stages of life-cycle, younger upon arrival and have a substantial knowledge of English.

A strong ethnic identity persists among the Chinese immigrants in Edmonton. This result indicates that residential dispersal does not prevent people from maintaining ethnic identity. On the other hand, the suburban group is less ethnically oriented than the Chinatown group. This result indicates that the suburban group has been more involved in Canadian society and thus has a greater potential to lose its ethnic identity. A statement outlining areas for future research concludes the thesis.

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Table of Contents

Chapter **Page**

1. Overview of the Study 1

1.1 Introduction 1
1.2 Definition of Assimilation 1
1.3 Three Theories of Assimilation 4
    1.3.1 The Anglo-Conformity 5
    1.3.2 The Melting Pot 7
    1.3.3 Cultural Pluralism 8
    1.3.4 A Comment on the three theories of Assimilation 9
1.4 Factors Affecting Assimilation 11
    1.4.1 Internal Factors 12
        1.4.1.1 Cultural and Racial Similarity with the Host Society . . . 12
        1.4.1.2 Degree of Institutional Completeness 13
        1.4.1.3 Demographic Characteristics 14
    1.4.2 External Factors 15
    1.4.3 Intergroup Relations 17
1.5 Residential Segregation: A Geographical Perspective on Assimilation 18
1.6 Residential Differentiation within an Ethnic Group 24
1.7 Statement of Problem 28
1.8 Organization of the Thesis 34

2. The Chinese in Edmonton 36

2.1 Chinese Immigration to Canada 36
2.2 Recent Chinese Immigration to Canada 41
2.3 The Chinese Community and Institutions in Edmonton 45
2.4 Demographic and Socioeconomic Characteristics of the Chinese in Edmonton 54
    2.4.1 Age Distribution 55
    2.4.2 Sex 56
    2.4.3 Marital Status 57
    2.4.4 Census Family Characteristics 58
    2.4.5 Age at Immigration 60
    2.4.6 Education 62
    2.4.7 Occupation 63
    2.4.8 Income 64
2.5 The Spatial Distribution of the Chinese in Edmonton 65

3. Data Collection and the Questionnaire 71

3.1 Study Area 71
3.2 Definition of the "Chinatown Group" and the "Suburban Group" 72
3.3 Sampling 72
    3.3.1 Survey Population 72
    3.3.2 Sampling Frame 75
    3.3.3 Sample Size 76
    3.3.4 The Survey 77
3.4 Immigration Features of the Respondents 79
3.5 Limitation of the Data 80
3.6 The Questionnaire 81
3.7 Summary 83

4. Residential Locational Choices and Socio-Demographic Characteristics ... 84

4.1 Reasons for Choosing the Present Dwelling 85
4.2 Socio-Demographic Characteristics of the Two Groups 92
    4.2.1 Age Distribution 93
    4.2.2 Marital Status and Spouse Origin 95
    4.2.3 Age of the Respondents on Arrival in Canada 97
    4.2.4 Length of Residence in Canada 99
    4.2.5 General Education Level 101
    4.2.6 Proficiency in the Chinese and English Languages 102
    4.2.7 Employment Status and Income 108
4.3 Summary 109

5. Maintenance of Ethnic Identity 111

5.1 Ethnic Maintenance in Cultural Aspects 111
    5.1.1 Language used at Home 111
    5.1.2 Dietary Preferences 114
    5.1.3 Festivals Celebrated 115
    5.1.4 Chinese Games Played 116
    5.1.5 Frequency of Reading Chinese Newspapers 118
    5.1.6 Frequency of Reading Chinese Books/Magazines 119
    5.1.7 Frequency of Listening to Chinese Radio 120
    5.1.8 Frequency of Watching Chinese TV 121
    5.1.9 Frequency of Borrowing/Renting/Purchasing Chinese Videos .. 122
5.2 Connection with Homeland 123
5.3 Maintenance of Ethnic Identity on the Secondary Level 126
5.4 Ethnicity Maintenance in Primary Interactions 131
    5.4.1 Organizational Participation 131
    5.4.2 Presence of Close Friends 134
    5.4.3 Attitude toward Canadians 136
5.5 Discussion and Summary 138

6. Conclusions **142**

6.1 Summary of Findings 142
6.2 Limitations of the Study 147
6.3 Suggestions for Future Research 148

Bibliography **151**

Appendices **158**

A. Code Book of Variables Used for χ^2 Testing in the Data Analysis 158
B. The Survey Questionnaire (English Version) 163
C. The Survey Questionnaire (Chinese Version) 170
D. The Covering Letter 177

List of Tables

Table 1.1 The Assimilation Process . . . 3

Table 2.1 Number of Immigrants from China, Hong Kong and Taiwan by Country of Last Permanent Residence and Year of Landing: 1985-1991 . . . 42

Table 2.2 Percentage of Immigrants from China, Hong Kong and Taiwan to Canada by Class:1985-1991 . . . 43

Table 2.3 Types of Chinese Business Institutions in Edmonton . . . 51

Table 2.4 Age Distribution of Edmonton's Population and the Chinese Sample: 1986 . . . 56

Table 2.5 Marital Status of Edmonton's Population and the Chinese Sample: 1986 . . . 58

Table 2.6 Census Family Size of Edmonton's Population and the Chinese Sample: 1986 . . . 59

Table 2.7 Age at Immigration of the Chinese in Edmonton: 1986 . . . 61

Table 2.8 Highest Level of Schooling of Edmonton's Population and the Chinese Sample: 1986 . . . 62

Table 2.9 Major Occupational Groups in the Labour Force 15 Years and Over of Edmonton's Population and the Chinese Sample: 1986 . . . 63

Table 2.10 The Income Distribution of Edmonton's Population and the Chinese sample: 1986 . . . 65

Table 3.1 Size of the Chinese Households in Edmonton: 1986 . . . 74

Table 3.2 Sample Sizes Needed with Given Levels of Confidence, Assuming a Variability of 50% and a Very Large Population . . . 77

Table 3.3 The Immigration Status of the Respondents . . . 79

Table 3.4 The Last Country of Permanent Residence of the Respondents . . . 80

Table 4.1 Reasons for Choosing the Present Dwelling . . . 86

Table 4.2 Reasons for Choosing the Present Dwelling (the Millwoods and Castle Downs Group) . . . 90

Table 4.3 Age Composition of the Respondents . . . 94

Table 4.4 Marriage Status of the Respondents 96

Table 4.5 Origin of the Respondents' Spouses 96

Table 4.6 Age of the Respondents at Arrival in Canada 98

Table 4.7 Length of Residence in Canada of the Respondents 101

Table 4.8 Education Status of the Respondents 101

Table 4.9 Chinese Schooling of the Respondents 104

Table 4.10 English Schooling of the Respondents 104

Table 4.11 Self-Evaluation of Proficiency in Chinese of the Respondents 106

Table 4.12 Self-Evaluation of Proficiency in English of the Respondents 107

Table 4.13 Employment Status of the Respondents 109

Table 4.14 Family Income of the Respondents 109

Table 5.1 Language Used to the Spouse at Home 112

Table 5.2 Language Used to the Children at Home 114

Table 5.3 Respondents' Frequency of Eating Western Food 115

Table 5.4 Chinese Festivals Celebrated 116

Table 5.5 Respondents' Frequency of Playing Chinese Games 117

Table 5.6 Respondents' Frequency of Reading Chinese Newspapers 118

Table 5.7 Respondents' Frequency of Reading Chinese Books/Magazines 120

Table 5.8 Respondents' Frequency of Listening to Chinese Radio 121

Table 5.9 Respondents' Frequency of Watching Chinese TV 122

Table 5.10 Respondents' Frequency of Borrowing/Renting/Purchasing
Chinese Videos 123

Table 5.11 The Number of People Who Still Have Relatives in the Homeland 124

Table 5.12 Respondents' Frequency of Contacts with Relatives 125

Table 5.13 Respondents' Frequency of Visiting Homeland 126

Table 5.14 Self-Employment Rate of the Respondent 127

Table 5.15 Ethnic Origin of the Customers/Clients of the Self-employed Respondents 128

Table 5.16 Ethnic Origin of the Employers 129

Table 5.17 Ethnic Origin of Coworkers 129

Table 5.18 Ethnic Origin of the Customers 129

Table 5.19 Respondents' Membership of Chinese Organizations 133

Table 5.20 Respondents' Frequency of Participation in the Chinese Organizations . . 134

Table 5.21 Respondents' Presence of Close Friends 136

Table 5.22 Respondents' Attitude Towards Canadians 138

List of Figures

Figure 2.1 Edmonton's Chinatown 49

Figure 2.2 Distribution of Chinese Restaurants,
Grocery Stores and Churches in Edmonton 53

Figure 2.3 Percentage Distribution of Chinese by Census
Tract 69

Chapter 1. Overview of the Study

1.1 Introduction

Ethnic minority problems have long been an area of interest in the Social Sciences. This is especially true in North America which has experienced great inflows of immigrants and as a result has great ethnic diversity. In geography, the study of ethnicity often concentrates on ethnic residential patterns. Many ethnic groups have developed their own residential clusters. An abundance of research has been conducted in an attempt to explain the formation of ethnic residential segregation and the evolution of ethnic residential distributions. A concept which has been frequently introduced during this kind of research is "assimilation". It is argued that an ethnic group's degree of residential segregation is related to its degree of assimilation. However, research also shows that the relationship between ethnic residential segregation and assimilation is very complicated. This thesis intends to use a case study of the Chinese in Edmonton to examine this relationship.

1.2 Definition of Assimilation

What is assimilation? Though frequently used it has been one of the most confusing and elusive concepts ever employed in the study of ethnicity. Many efforts have been made to determine its nature and essence. As early as the 1920's, Park and Burgesss (1921) described assimilation as a "process of interpenetration and fusion in which persons and groups acquire the memories, sentiments and attitudes of other persons or groups, and , by sharing their experience and history, are incorporated with them in a common cultural life." This definition emphasizes the change of culture, the change in a people's way of life, during the assimilation process.

Several other authors also emphasized the change of culture in the process of assimilation. Berry (1958:210) commented that "by assimilation we mean the process whereby groups with different cultures come to have a common culture...Assimilation refers thus to the fusion of cultural heritages...". Cuber (1955:609) stated "assimilation may be defined as the gradual process whereby cultural differences tend to disappear." Rose (1956:557-8) defined assimilation as "the adoption by a person or group of the culture of another social group to such a complete extent that the person or group no longer has any characteristics identifying him with his former culture and no longer has any particular loyalties to his former culture."

All the above definitions described the nature of assimilation as only acculturation, i.e., the changes of cultures of either one of the two groups or both groups. This perspective has been criticized by Gordon (1964). Gordon argued that assimilation should not only include changes in cultural values and behavior but also include changes in social participation-a change in the clubs and institutions to which a person belongs; and changes in identification-what group (the group of one's own ethnicity or the host society) a person feels he/she belongs. He also conceived the absence of prejudice and discrimination as a scale to measure the degree of assimilation. Thus, he divided the assimilation process into seven subprocesses or dimensions (see Table 1.1).

Gordon's definition of assimilation has proved to be the most significant and influential one. It had a great impact on empirical research. Numerous studies have used Gordon's assimilation variables to analyze and compare the assimilation status of different ethnic groups (Jiobu, 1988; Himmelfarb, 1979; Lai, 1972). In Gordon's definition, the central theme is that assimilation is not a single social process but a number of different subprocesses and that each subprocess may take place to varying degrees.

Table 1.1 The Assimilation Process

Subprocess or Condition	**Type or Stage of Assimilation**
Change of cultural patterns to those of host society	Cultural or behavioral assimilation
Large-scale entrance into cliques, clubs, and institutions of host society, on primary group level	Structural assimilation
Large-scale intermarriage	Marital assimilation
Development of sense of peoplehood based exclusively on host society	Identificational assimilation
Absence of prejudice	Attitude receptional assimilation
Absence of discrimination	Behavior receptional assimilation
Absence of value and power conflict	Civic assimilation

Source: Adapted from Gordon's *Assimilation in American Life,* p71.

Among the seven processes, Gordon contends cultural assimilation and structural assimilation are the most important two subprocesses. Cultural assimilation which refers to the change in the cultural pattern, such as dress, food, and accent, is likely to take place first. The rationale is that rapid cultural assimilation may lead to a better standing of one's social status especially in occupations and jobs (Murguía, 1975). Gordon also contends that structural assimilation which means large-scale entrance into cliques, clubs, and institutions of the host society, is the key to the whole assimilation process. Once structural assimilation occurs all of the other types of assimilation will naturally follow. However, he admitted that although cultural assimilation has been taking place rapidly among racial and ethnic groups in American society, very little structural assimilation has occurred among these groups. Moreover, he argued that cultural assimilation may go on indefinitely without structural assimilation.

It should be mentioned here that Gordon's structural assimilation mainly refers to assimilation on the primary group level. According to Gordon (1964:31), various social groups can be put into two general categories. One is the primary group, the other is the secondary group. The primary group is a group in which contact is personal, informal, intimate and usually face to face. The interactions between the participants are based on kinship and friendship. The secondary group is a group in which contacts tend to be impersonal, formal and non-intimate. Gordon argued that although many ethnic groups have or will be assimilated in occupations, i.e. on the secondary group level, few have become assimilated on the primary group level.

1.3 Three theories of Assimilation

What has been discussed above is the meaning of the "pure" assimilation process. It has explained what assimilation "exactly" is and shown how it looks when a complete assimilation takes place. In Gordon's (1964:69) words, this is an "ideal type" of assimilation---"ideal not in the value sense of being most desirable but in the sense of representing the various elements of the concept and their interrelationships in "pure", or unqualified fashion".

In a pluralist society like Canada and the United States, rather than focusing on what pure assimilation is, researchers are more concerned with whether this pure assimilation will take place at all and whether assimilation will proceed through Gordon's seven subprocesses exactly. Historically three theories concerning the assimilation process have emerged. They are Anglo-Conformity, the Melting Pot and Cultural Pluralism.

1.3.1 The Anglo-Conformity Theory

The theory of Anglo-Conformity states that when a minority group and the majority group meet and interact with each other, the result is that the minority group will abandon its ancestral culture and take on the culture of the majority. The minority group becomes incorporated into the majority group. The interaction will lead only to a one way process. Only the minority group changes. The majority group does not change itself. The theory can be expressed in the formula $A+B+C=A$, where A, B, and C represent different social groups and A represents the majority group. In the case of the United States and Canada, the majority group is the White Anglo-Saxon Protestants so that the theory is known as "Anglo-Conformity".

In theory, Anglo-conformity may be achieved by the complete assimilation of the minority into the dominant culture. Assimilation could conceivably be so complete that ethnicity (which refers to a group of people who are of the same race, have common ancestral origin, who share the same culture, religion and who use the same language) will totally disappear and the minority group will become identical to the majority. The representative of this school was Robert Park. Park (1921) suggested that the pattern of interaction among different ethnic groups passes through the stages of isolation, competition, conflict, accommodation and assimilation. No matter how fast or how slow, whether or not intervention occurs, assimilation is an inevitable process.

The Anglo-Conformity theory and Park's unilinear pattern of the race relation cycle have been criticized by many researchers. Driedger (1989:38) argued that although some groups, such as Scandinavians, did follow the assimilation process, many others did not. He criticized the theory as it tends to "ignore groups which retained a separate identity and to regard their separateness as a relatively insignificant factor in the total pattern of minority-majority relations."

Similar criticism can be found from Etzioni's (1959) study. In his article of an analysis of Wirth's study of the Ghetto, Etzioni (1959:255) first criticized the assumption that assimilation will happen eventually as unscientific. He stated:

> When an ethnic group is assimilating, it is suggested that the hypothesis is supported; if an ethnic group is not assimilating, it is suggested that it has not yet reached the stage of assimilation. "Eventually" one can still hold, every ethnic group will be assimilated. As no time interval is mentioned and the sociological conditions under which the process of assimilation will take place are not spelled out, the whole scheme becomes unscientific.

He then went on to criticize the notion that the forces further changing the pattern of interaction are not clear and that the assimilation process from stage to stage seemed to be too "natural" in Park's theory. Etzioni (1959:256) argued that although ethnic groups are often forced into initial contact by the process of technological, economic and social changes, the remaining stages in Park's race and ethnic cycle should be seen as alternative situations rather than links in an evolutionary process leading to complete assimilation. He suggested that after initial contact, the ethnic groups may be in a state of conflict, a state of accommodation or a state of assimilation. Which alternative would happen depends on the specific conditions experienced by the ethnic groups.

1.3.2 The Melting Pot Theory

Basic to the Melting Pot theory is the assumption that assimilation does not proceed in a single direction towards conformity with the host society as the Anglo-Conformity theory assumes. Instead the Melting Pot theory argues that both the majority group and minority groups will contribute to develop a new society. Their culture will be merged into a single and coherent national culture (Fleras and Elliott, 1992:62). The process is implemented through a range of practices, including intermarriage and education. The new breed of people and new blend of culture is somewhat different from any one of the groups separately. Written in a formula, the Melting Pot theory can be expressed as $A+B+C=D$, where A, B, and C represent different social groups and D represents an amalgam, a synthesis of these groups into a new entity (Newman, 1973:63).

The Melting Pot ideology has been very popular in the United States to the extent that "the Melting Pot" has become a metaphor for that country. However, there are some shortcomings to this theory. Gordon (1964:124) questioned that it is not clear whether all groups will make an equally influential contribution to the pot or "whether there is to be a proportionate influence depending upon the size, power, and strategic location of the various groups". Furthermore, Gordon (1964:130) and Driedger (1989) contend that in the North American societies Protestants, Catholics and Jews have never "melted" and the various racial groups have not "melted" with the white. They argued that in reality North American society has come to be composed of a number of "pots" or subsocieties rather than one pot.

1.3.3 Cultural Pluralism

The meaning of the phrase "cultural pluralism" may be expressed in the formula A+B+C=A+B+C, where A, B, and C represent different ethnic groups that, over time, maintain their own identities. Horace Kallen has been acknowledged as the originator of the "cultural pluralism" idea. He envisioned a utopian society in which ethnic groups would maintain their distinctiveness but coexist in harmony and respect. He argued that this was possible because each group participates in the overall economic and political life of the nation (Gordon, 1964:141-50).

Forty years later, Gordon (1964) clarified the concept of cultural pluralism. He said it is possible for separate subsocieties to continue their existence even while the cultural differences between them are progressively reduced and eliminated. In order to understand this situation, one has to remember Gordon's distinction between cultural assimilation and structural assimilation. As Gordon suggested, ethnic groups may adopt, in a short period of time, the dominant group's cultural pattern in such features as food, dress, customs and language. Nevertheless, each ethnic group can still maintain its structural uniqueness relative to the other groups. This situation may go on indefinitely. The American society has become culturally integrated into one society but remains structurally separated into several subsocieties. In this sense, cultural pluralism should really be known as structural pluralism since it is structurally not culturally that the American society remains separated into several subsocieties.

At about the same time when Gordon published his *Assimilation in American Life*, another two authors, Glazer and Moynihan (1963), also published a book-*Beyond the Melting*

Pot---attempting to explain cultural pluralism. Through case studies of several groups-Blacks, Jews, Puerto Ricans, Italians and Irish in New York city, they claimed that throughout American history the various streams of population had remained separate from one another by origin and religion and they had never "melted". They pointed out that the Blacks are often discriminated against; the Jews are proud of their distinct identity and do not wish to assimilate; while Puerto Ricans, Irish and Italians represent combinations of these voluntary and involuntary forces.

The major hypothesis of Glazer and Moynihan is that over time these ethnic groups change but still retain their distinct ethnic identity. They stated:

> The assimilating power of American society and culture operated on immigrant groups in different ways, to make them, it is true, something that they had not been, but still something distinct and identifiable... The ethnic group in American society became not a survival from the age of mass immigration but a new social form (Glaze and Moynihan, 1963:13-14, 16).

In a shorthand format, their theory may be expressed as $A+B+C= A'+B'+C'$, where A, B and C represent different ethnic groups and A', B' and C' represent groups that have been changed from the original ones but also are distinct from one another. In other words, an African Black is different from an American Black and an Italian in Italy is different from an American Italian.

1.3.4 A Comment on the Three Theories of Assimilation

The setting of the three theories discussed above is in North America, an advanced industrial-technological society. All the three theories try to explain what will happen to ethnic groups when they are introduced into such a society. For theorists of Anglo-conformity and the Melting Pot, ethnic groups will abandon their culture and group identity during their adaption to the host society. People of the ethnic groups will be integrated into the host society only as "individuals". The underlying hypothesis is that upward social mobility is the basic goal of everyone. However, ethnicity would directly restrict mobility and opportunity (Porter, 1965:63-64). In order to move upward in the social class ladder, people of the ethnic groups, regardless of their race, culture and religion have to abandon their ethnic identity. While the theory of cultural pluralism also admits that an aspiration to upward social mobility will change ethnic minorities, it argues that minorities will retain their ethnic characteristics at least partially. This means that in the process of adaption, an ethnic group can remain different collectively. Fleras & Elliott (1992:56) described this characteristic of cultural pluralism as "unity within-diversity".

During the 1970's, more complicated theories dealing with ethnic relations emerged. In his book titled *American Pluralism*, Newman criticized all the above theories as variants of "consensus" theory in which social order was conceived as the most important aspect of societies and the eventual outcome of group interactions (Newman, 1973). He also criticized all the above theories containing false assumptions about the linear nature of American assimilation and the homogeneity of ethnic group structures and aspirations. In reaction to these defects, Newman provided the alternative of "conflict" theory in which social conflict was perceived as a persistent social phenomenon in an industrial society. He also perceived ethnic diversity and ethnic relations as a form of social conflict. The result of conflict is that different ethnic groups may undergo different types of assimilation and pluralism. Based on Newman's conflict theory, Driedger (1989) developed a conceptual conformity-pluralist model for the Canadian society in which conformity and pluralism, voluntary and involuntary are the ends of two continuums. He argued that the dynamics of conflict will lead to the assimilation of some minority Europeans, the voluntary assimilation of French, Jews, Hutterites and Aboriginal and the involuntary pluralism of some visible minorities such as Asians. Which assimilation pattern an ethnic group follows will largely depend on the specific situations involved. These situations include an ethnic group's cultural and racial similarity with the host society, the ethnic group's degree of institutional completeness and demographic characteristics, the host society's tolerance towards ethnic diversity and the mode of entry (voluntary or involuntary) of the ethnic group (Anderson and Frideres, 1981). Thus, in order to understand the different assimilation patterns of ethnic groups, we will discuss these situations, in other words, the factors affecting assimilation.

1.4 Factors Affecting Assimilation Patterns

As discussed above, different ethnic groups may undergo different assimilation patterns. Some will follow the Anglo-conformity process, some will follow the pluralistic process. From another point of view, assimilation is a matter of degree. Some groups will be more assimilated than others. The assimilation process can be perceived as a continuum with total assimilation and total pluralism at its two ends. Different ethnic groups are located at different points of the continuum. Several authors have identified a list of factors which may determine the different pattern or different degree of assimilation an ethnic group may adopt (Anderson and Frideres, 1981; Yinger, 1981; Murguía, 1975). These factors can be put into three general categories. They are internal factors, external factors and inter-group relation factors.

1.4.1 Internal Factors

The internal factors which determine a group's assimilation pattern include its racial and cultural similarity with the host society, its degree of institutional completeness and its demographic characteristics.

1.4.1.1 Cultural and Racial Similarity with the Host Society

As early as 1945, Warner and Srole (1945) developed an important proposition concerning the effect of culture and race on assimilation in the United States. They argued that the greater the cultural and racial differences between the immigrant group and the host society, the greater will be the strength of the immigrant group's "subsystem" which indicates the institutions and informal social network of the ethnic group, and also the longer will be the period over which the immigrant group assimilates (Warner and Srole, 1945:285-86). On the basis of language and religious similarities with the White English-Speaking Protestants, Warner and Srole listed a set of culture types in order of their potential to assimilate. They are:

I. English-Speaking Protestants
II. Protestants who do not speak English
III. English-Speaking Catholics and other non-protestants
IV. Catholics and other non-Protestants, most of whom speak allied Indo-European languages
V. English Speaking non-Christians
VI. Non-Christians who do not speak English

According to this classification, the most recent immigrant groups in Canada, such as the Chinese and South Asians, are culturally very remote from the White Anglo-Saxon Protestant majority. Therefore these groups will have a long way to go before they are fully assimilated into the host society, if they will ever be assimilated.

Race is often proposed as the most important variable determining the speed of assimilation (Anderson and Frideres, 1981; Murguía, 1975). Murguía (1975:40) stated that race itself may block structural assimilation and, as a consequence, the whole assimilation process even if the other variables are favorable. On the one hand, the White Anglo-Saxon Protestant majority group does not want other racial groups to be assimilated as they believe that people of other races are of inferior status (Driedger, 1989:295). On the other hand, as a result of discrimination, the racial groups may avoid contacts with the host society and maintain a stronger ethnic identity (Rodriguez, 1975).

1.4.1.2 Degree of Institutional Completeness

According to Raymond Breton (1964), the degree of institutional completeness may bear on ethnic persistence and affect the assimilation process. He felt that a pure theory of assimilation was of questionable value. Immigrants may be integrated or assimilated in different directions depending to which community they are attracted. In other words, immigrants may be integrated or assimilated into either the host society, their own community or another immigrant community on the basis of the community into which they have rebuilt their new network of personal affiliations.

Breton was interested in the influence of institutional completeness on the direction of the immigrants' social integration. He said the degree of institutional completeness (the extent an ethnic community has established its own-use institutions) may vary from group to group. The extreme and idealized degree of institutional completeness would be when the ethnic community could perform all the services required by its members so that members of that group would never have to make use of the institutions outside the community. If this is the case, ethnic identity will persist and structural assimilation will be resisted. However, Breton admitted that in North America, few ethnic communities show full institutional completeness. Nonetheless, he proposed that a group with a higher degree of institutional completeness will have a greater capacity to attract immigrants of its own kind within its own social orbit.

In measuring the degree of institutional completeness of an ethnic group, Breton emphasized the importance of the diversity and the complexity of its institutions. He posited that the diversity of institutions is more important than sheer numbers of one type of institution. Among the different types of institutions, churches, welfare organizations and newspapers are the most important.

1.4.1.3 Demographic Characteristics

The demographic conditions include an ethnic group's size, distribution and its age, sex, occupational and educational structure. The variable size is very important in determining whether an ethnic group will follow a path towards eventual assimilation. Murguía (1975:39) argued that little structural assimilation will occur if an ethnic group's numbers are large (relative to the majority) because there will be no need for the ethnic group to seek primary relationships with the other groups. The function of a group's size can be intensified when the group is densely settled in a geographical area. On the one hand, geographical proximity increases the opportunities for contacts. Ley (1983:184) argued that physical distance has a profound influence on the formation of social relationships . Lieberson's (1961) study showed that a group with a high degree of residential segregation is less apt to speak English and is less apt to intermarry. However, the relationship between ethnic residential segregation and assimilation is a rather complicated one. It will be discussed separately later (see page 17). On the other hand, large population size and geographical proximity may help an ethnic group win political power since these two factors may ensure some political representation. When an ethnic group is politically powerful, ethnic revival is likely to follow (Murguía, 1975).

Such demographic factors as age, sex, occupational and educational status, also serve as intervening variables in the assimilation process. Hoyt and Babchuk's (1981) study suggested that the older ethnic group members have a stronger ethnic identity than the younger. Anderson and Frideres (1981) pointed out that female ethnic group members will emphasize their ethnic identity more than males because they neither participate in the workforce to the extent that males do nor do they have as many contacts with the outside world. However, Anderson and Frideres (1981) also pointed out that this assumption needs further study. Occupation and education indicates one's socioeconomic status. Hurh *et al*'s (1978) study on the Korean assimilation pattern in the United States found that people with a higher socioeconomic status are more assimilated in their everyday lives than those with lower socioeconomic status. For example, people with a higher socioeconomic status are more proficient with English, use English more frequently at home, eat western food more often, and are more willing to discard Korean customs.

1.4.2 External Factors

The external factors affecting the assimilation process mainly relate to the social environment in the host society. If the host society tolerates ethnic diversity, then the minority will have a better chance of continuing with their previous lifestyles (Anderson and Friederes, 1981:107). It is argued that ethnic identity will persist especially when the national identity is relatively weak or confusing compared to sub-national or ethnic identities (Anderson and Friederes, 1981:107).

According to the above arguments, Canada's social environment is very favorable toward ethnic persistence. Canada's official policy toward ethnic diversity is multiculturalism which seeks to promote the retention of ethnic heritages and the sharing of them with all Canadians (Berry, 1977:1). The policy rests upon the assumption that "if an individual is to be open in his ethnic attitudes and have respect for other groups, he must have confidence in his own cultural foundations" (Berry, 1977:2). Although some people argued that multiculturalism was merely a political response to the Quebecois separationalists (Fleras & Elliott, 1992:66), and some others criticized it as a policy which tried to ignore the intolerance and assimilationist forces in Canadian history (Palmer, 1976), Berry *el al*'s (1977) national survey showed that most Canadians' attitudes towards a policy of multiculturalism were fairly positive. In this respect, Canada has a very favorable environment fostering ethnic pluralism. A more recent analysis of public opinion towards immigration using the results of more than sixty surveys, showed that Canadians' degree of tolerance toward immigration is reasonably high and slightly rising during the period of 1975 - 1990. However, the report also pointed out that in situations where the unemployment rate is high or where the increase of visible minority immigrants is unusually rapid, the degree of tolerance tends to decrease (Economic Council of Canada, 1991). Considering the high unemployment rate in Canada in the past two years, we might expect a less favorable environment towards immigration and multiculturalism today.

1.4.3 Intergroup Relations

Intergroup relations as a factor which affect a group's assimilation process mainly relate to the mode of entry of the minority group. Murguía (1975) put the mode of entry of a minority group into two categories. One was voluntary and the other involuntary. He posited that these two different types of entry were very important in determining the assimilation path. If a group is conquered in the war, which means the mode of entry is involuntary, then the bloodshed and enmity of the original conflict will remain in the consciousness of both sides for a long time. Furthermore, the bitter enduring memories will impede structural assimilation. This argument more or less illustrated the French Canadian experience in Canada. They were conquered by the British, but refused to be assimilated. On the contrary, because they are relatively large in size and spatially concentrated in Quebec, they virtually have become a state within a state and politically are more and more influential. Opposite to a movement towards assimilation, they try to maintain their ethnic identity to the extent that some of them want to separate from Canada.

However, if a minority group's mode of entry is voluntary, there will be no such bitter feelings at the outset. The immigrants may be eager to look for contacts with the dominant groups and try to imitate some of their behavior so that they can achieve upward social mobility. In fact, most of the minority groups in Canada have migrated voluntarily. Thus, the factor of mode of entry may not apply to them. Nonetheless, the mode of entry of a minority group as a factor affecting assimilation puts the assimilation process into the general framework of ethnic relations. At least, we can say, not all minority-majority contact leads to the assimilation of the minority.

1.5 Residential Segregation: A Geographical Perspective on Assimilation

The above sections reviewed theories about assimilation and factors affecting the assimilation process. In geography, research on assimilation usually focuses on ethnic residential patterns. The ethnic group's residential pattern is usually viewed as an indicator of its degree of assimilation (Duncan and Lieberson, 1959). The ethnic groups which are residentially more dispersed are said to be more assimilated than those which are residentially more segregated. However, this argument seems to be too broad, in some way, since assimilation includes so many dimensions. For example, suppose Group A is more residentially dispersed than Group B. Is Group A more assimilated than Group B? If it is, then in what areas? Is Group A only culturally more assimilated or both culturally and structurally more assimilated? In order to answer these questions, one has to understand first why ethnic groups are either segregated or dispersed. Although various factors may be responsible for the formation of ethnic residential segregation such as language difficulties, discrimination by the host society and the desire to maintain one's own culture, in general two models have been generated to describe the basic reasons accounting for ethnic residential segregation. One is the social class model, the other is the ethnic model.

For many decades the influence of the Chicago School of urban ecology dominated theory and research about ethnic residential patterns in urban areas. According to this school, ethnic residential segregation is, by and large, a reflection of social class differences. No matter what are the reasons, either recency of immigration or language problems, ethnic groups vary in social class (Duncan and Lieberson, 1959). Those groups at the bottom of the socioeconomic scale are less competitive in the housing market and are "forced" to live together in cheaper, poorer quality, housing.

According to the social class model, upward social mobility is the ultimate goal for every ethnic group and throughout time all ethnic groups will achieve upward socioeconomic mobility as assimilation takes place (Cressey, 1938; Duncan and Lieberson, 1959; Taeuber and Taeuber, 1964). In this sense, ethnic residential segregation is only a temporary phenomenon and eventually will disappear. In the social class model the degree of residential segregation reflects a group's socioeconomic status, while the group's socioeconomic status reflects its degree of assimilation. It is logical to conclude from the social class model that a group's degree of residential segregation reflects its degree of assimilation.

If the above hypotheses have not been developed for all ethnic groups, at least they have been thought correct to explain segregation and desegregation of white ethnic groups. Many researchers of the social class school have found that most white ethnic groups experience residential dispersal as a result of assimilation although they suggest that the rates of dispersal may vary from one group to another (Balakrishnan, 1976; Golant and Jacobsen, 1978; Guest and Weed, 1976; Uyeki, 1980). As this school perceives residential segregation and assimilation as highly associated variables, many studies have been conducted to examine the degree of segregation and the degree of assimilation in other areas, such as occupation and intermarriage . It has been found that the group which is less residentially segregated has a higher status on the occupation ladder and has a higher degree of intermarriage (Duncan and Lieberson, 1959; Jones, 1967).

The social class model hypothesized a unilinear pattern of assimilation and residential dispersal for all the groups. However, the problem is whether an ethnic group has to be assimilated in order to move upward in the socioeconomic status and has to experience residential dispersal after it becomes more competitive in the housing market? The Jews are believed to have very high socioeconomic status (Driedger, 1989), but they have maintained a very strong ethnic identity and are not residentially dispersed. They may be culturally assimilated but definitely not structurally assimilated. Moreover, there is evidence to show that social class effects have not been adequately used to explain ethnic residential segregation. This stems from the difficulties of defining the term "social class" and putting it into operation (Bleda, 1978 and 1979; Darroch and Marston, 1971).

It has now been widely acknowledged that ethnicity plays an important and *independent* role on the formation and the continuance of ethnic residential segregation (Kantrowitz, 1973; 1980). Although the residential locations of ethnic groups are influenced by socioeconomic status of their members, social class alone is not sufficient, by itself, to explain ethnic residential patterns (Gloant and Jacobsen, 1978). The ethnic model includes both the involuntary factor such as discrimination, and the voluntary factor such as the desire to maintain one's own culture. The American Blacks' high degree of residential segregation highlights the impact of discrimination (Taeuber and Taeuber, 1964). Both Rose's (1981) and Farley's (1970) study showed that an advance in socioeconomic status of some American Blacks did not cause a decrease in residential segregation. On the contrary, these American Blacks moved to the suburbs and formed new clusters there. On the other hand, members of the ethnic groups may choose to live voluntarily in close proximity so that ethnic identity can be maintained (Fiery,1945; Driedger and Church, 1974; Glebe, 1986;).

For example, after a survey of Chicago Jewish residential mobility, Jaret (1979) reported that the suburbanized Jewish still seek spatial propinquity. One-third of the Jewish households indicated living on blocks which were at least seventy-five percent Jewish at the time of the survey and about one-quarter reported living on blocks forty-one to seventy-five percent Jewish.

Since ethnic identity is the key point to understanding voluntary ethnic residential segregation, it is necessary to operationalize the term "ethnic identity" before going on. Dashefsky (1976:8) defined *group identification* as "a generalized attitude indicative of a personal attachment to the group and a positive orientation toward being a member of the group". Based on this definition, he pointed out that "ethnic group identification occurs when the group in question is one with whom the individual believes he has a common ancestry based on shared individual characteristics and/or shared sociocultural experiences." In empirical research, ethnic identity is operationalized as a multiplicity of factors by the ways people identify themselves with their ethnic group. These factors usually include language use, religious practice, endogamy, parochial education, choice of ingroup friends, use of ethnic media, participation in ethnic entertainment and voluntary organizations (Driedger, 1989; 1976; Driedger and Peters, 1977).

Voluntary ethnic residential clustering is said to have some benefits for the maintenance of ethnic identity. Driedger and Church (1974) reasoned that residential segregation is a necessary condition for a high degree of institutional completeness which, according to Breton (1964), is crucial to the maintenance of ethnic identity. They argued that residential segregation offered a threshold for the survival of some ethnic institutions such as churches, schools and grocery stores. Driedger and Church (1974) examined the residential distribution patterns of six Winnipeg ethnic groups between 1941 and 1961 and found that the French and the Jews were the most highly segregated groups and had the highest degree of institutional completeness although the two groups developed different types of residential mobility. The French remained in the original area where their ethnic institutions were established and concentrated. The Jews moved out of the original area of concentration to the suburbs where new institutions and residential segregation were re-established. In contrast to the French and the Jews, the Scandinavians had few institutions and thus were the least segregated (Driedger and Church, 1974).

If Driedger and Church's argument about the relationship between spatial proximity and ethnic identity maintenance is correct, then it is logical to assume that those ethnic groups which have been residentially dispersed can not maintain ethnic identity and thus will be assimilated. However, there is some evidence to show that the survival of ethnic communities may rely more on informal social networks rather than geographical proximity (Agócs, 1981). As early as 1963, Webber put forward a concept of "community without propinquity". He stated that modern communication and transportation have made it relatively easy for people to stay in touch with their kin and friends even after they have become residentially dispersed (Webber, 1963). As an extension of Webber's concept, people of the various ethnic groups can still use their ethnic language and media, go to local stores for their own food and take part in the ethnic activities after they have become residentially dispersed. Therefore, residential dispersal does not necessarily cause the diminution of ethnic identity.

In analyzing the residential patterns of ethnic groups, Agócs (1981) supported Webber's concept and argued that a viable ethnic community may exist despite the dispersal of residences and institutions. He stated:

> Some ethnic communities in contemporary urban areas may be based less upon residential propinquity than on communication, interaction and shared activities of widely dispersed social networks. The same technological and economic forces that have stimulated suburban development and urban decentralization have permitted members of spatially dispersed ethnic networks to maintain contact. The universal availability of the automobile and telephone in the suburbs has to some degree freed people from dependence upon spatial propinquity for the maintenance of social relations.

The statement implies that first, residential segregation is not a necessary condition for a high degree of institutional completeness. This is contrary to Driedger and Church's research. Ethnic institutions can be distributed dispersedly in order to serve a residentially dispersed population. Second, there is no direct relationship between residential segregation and assimilation. For Agócs, ethnic segregation not only includes spatial segregation but also "social interaction segregation". Even when a group is residentially dispersed which means spatial segregation does not exist anymore, people within that group can still interact with people of the same ethnic origin. In this sense, social interaction segregation may go on without residential segregation. Similar arguments can be found from Matwijiw's (1979) study of the residential distribution patterns of several ethnic groups in Winnipeg. Matwijiw also pointed out that the relationship between residential segregation and assimilation was indirect. He said that "weakened patterns of ethnic segregation have not resulted in the diminution of ethnic differences" (Matwijiw, 1979:47).

The preceding pages briefly reviewed theoretical perspectives on ethnic residential segregation as well as its relationship with assimilation. The discussion suggested that the relationship between ethnic residential segregation and assimilation was very complicated. On the one hand, upward social mobility makes residential dispersal available but does not necessarily cause residential dispersal. On the other hand residential dispersal does not necessarily cause a diminution of ethnic identity.

1.6 Residential Differentiation within an Ethnic Group

The above discussion focused on group differences in residential patterns. The next question is what about the situation within an ethnic group? What factors cause residential differentiation among people of the same ethnic origin? Who lives in the ethnic cluster? Who lives outside it? Are people who live outside their cluster more assimilated than those who live in it?

Ley (1983:63) proposed that socioeconomic status, stages in the life-cycle and ethnicity are the three major reasons for residential differentiation. He stated that socioeconomic status is the basic means by which to classify people into different residential areas with different land values. This residential differentiation pattern is far more varied due to factors such as life-cycle stages and ethnicity. Following this argument, it is reasonable to assume that people who are better off are more likely to live in the better quality suburban neighborhoods while people who are less wealthy are more likely to live in residences of poorer quality in the inner-city neighborhoods.

Stages in the life-cycle also play a very important role in people's residential locational choices. People at different life stages have different environmental needs.

Families with children are more likely to live in single-family homes in the suburbs (Michelson, 1976; Gist and Fava, 1974). The innermost residential zones are not regarded as favorable for bringing up children (Ley, 1983). They are high-risk environments in terms of heavy traffic flows and the high incidence of street crime. Single-family homes are believed the most suitable environment for raising children. Such houses, with their own yards, allow mothers to supervise children's play from kitchen windows (Michelson, 1976; Gist and Fava, 1974).

Another stage in the life-cycle which raises special concern about housing and environmental needs is when people reach old age. Michelson (1976) said that the elderly find greater satisfaction when living in age-segregated apartment complexes since age-segregated apartments have a greater ability to bring sociability into the lives of the elderly. In addition, the elderly also want to live close to stores and bus stops to other centers (Michelson, 1976). A study of the elderly in Vancouver indicated that three times more respondents considered stores and buses as important services than health services, parks, libraries and the like (Hanowski *et al*, 1962). Thus, proximity to sources of life and activity is very important to the elderly.

The third factor, ethnicity, is the most complicated one. According to the foregoing discussion, people may choose to live in proximity in order to maintain their ethnic identity. However, some studies suggest that even when people are residentially dispersed throughout the city they can still practise ethnic life-styles and maintain ethnic identity (Agócs, 1981). If this is the case, it is difficult to determine the effect of "ethnic identity" on people's residential locational choices. Why it is difficult to study ethnic residential patterns in relation to assimilation is that people's residential locational choices are not only related to ethnicity but also to factors such as stages in the life-cycle which are universally applicable to any group. Empirical research has shown it is very hard to sort out the proportionate impact of each factor-social class, ethnicity and stages in life-cycle-on ethnic people's residential locational choices. In fact, most of the time all the above three factors may function together in people's decision making process. For example, an old Chinese man who lives on a pension and who cannot speak English is very likely to live in Chinatown where the same type of people are concentrated. In this case, the person's socio-demographic characteristics determines their social class, ethnicity and life-cycle stage all have some effect on his decision of where to live.

Despite the difficulties in studies of factors accounting for residential differentiation within an ethnic group, there is some valuable literature which has contributed to this area of research. In his study of urban renewal and Chinese relocation patterns in Vancouver, Nann (1970) stated that when the urban renewal program for the Chinatown area called for gradual clearance and redevelopment over a twenty year period, the Chinese families resident in the Chinatown area exhibited three distinct relocation patterns. Some left Chinatown, some moved into public housing offered by the urban renewal agency and some others chose to remain in Chinatown, seeking out available private accommodation. He found that social class, stages in the life-cycle and ethnicity all served to differentiate where the Chinese people would move to during the urban renewal program. However Nann himself could not solve the problem of how much each factor impacts on people's final decisions. Nann's major contribution was that he identified eight socio-demographic variables which can significantly distinguish people from either staying in Chinatown or leaving Chinatown during the urban renewal program. In fact, these variables do not only provide a better understanding of why people live where they do but also provide a better understanding of why people live the way they do. To a large extent, people's life-styles reflect their socio-economic-demographic characteristics. The eight variables are: total income of the household which is directly related to social class; age of the family head, total number of persons living in the home, presence of children in the home aged 6 to 12, presence of children in the home under 6 years of age which are related to people's stages in the life-cycle; age when the family head came to Canada, ability to speak, read and write Chinese and years of English schooling all of which are related to people's "assimilation status".

The three variables "age when family head came to Canada", "ability to speak, read and write Chinese" and "years of English schooling" are referred as "assimilation status" variables by the writer simply because they are so tightly related to one's degree and potential to assimilate. It is not difficult to understand that language is the key to assimilation. Before one can participate in a society, he/she must have a minimal knowledge of its language. For this reason, ability in English is not only the indicator of the first-step in assimilation but also determines to what extent an immigrant might be assimilated in the future. By the same token, loss of ability in one's ethnic language is also an indicator of assimilation. Age upon arrival is another variable closely related to one's degree of assimilation. By common sense, the younger a person is when entering the receiving country, the easier he/she will be assimilated.

By aggregating his findings, Nann (1970:78-84) developed profiles of "typical" families for both the group who stayed in Chinatown and the group who left Chinatown. A "typical" family who stayed in Chinatown and moved into public housing, was headed by a person usually old, retired, with some education in the ethnic languages prior to emigrating but hardly had received any English schooling in Canada and had only a limited knowledge of English. In a "typical" family who left Chinatown, the family head was usually around forty years old, employed in a fairly high status type of occupation, had received some Chinese schooling prior to emigrating and also had received some English schooling after arrival in Canada. Usually people in this group have a good command of English. In the last part of the study, Nann admitted that despite the above differences, a strong ethnic identity could be found in both groups. This finding suggests that people's residential pattern may not be strongly associated with their ethnic identity.

In summary, although the residences of ethnic people are often related to their assimilation status, the above discussion suggested that this relationship may be very complicated and indirect rather than simple and direct. Within an ethnic group, where people live may be caused by factors related to assimilation such as socioeconomic status and ethnic identity. It may also be caused by the life-cycle stage factor, which is not closely and directly related to assimilation. Thus an ethnic group's residential pattern and its degree of assimilation and ethnic identity is very complicated.

1.7 Statement of Problem

The present study attempts to examine the relationship between ethnic residential segregation and assimilation by establishing the extent to which ethnic residential dispersal is associated with diminished ethnic identity. The study is motivated by the lack of case studies of ethnic residential patterns with respect to assimilation and the maintenance of ethnic identity. The discussion above has shown that in the previous studies there is a common underlying assumption that the degree of ethnic residential segregation indicates the degree of assimilation. Involuntary segregation, due to low socio-economic status and racial discrimination, prevents an ethnic group from assimilating. Voluntary segregation, due to a willingness to maintain ethnic identity, shows an ethnic group's refusal to assimilate. It is argued that ethnic residential segregation is a necessary condition for a high degree of institutional completeness which, in turn, is crucial to the maintenance of ethnic identity (Driedger and Church, 1974). As a logical extension, if an ethnic group is residentially dispersed, its ethnic identity will be weakened and the group will be more assimilated. As a further extension, within an ethnic group, those who live dispersed throughout the city must be less ethnically oriented, and thus be more assimilated, than those members of the group who live segregated, involuntarily or voluntarily.

However, whether ethnic residential dispersal indicates a diminished ethnic identity and whether people who live dispersed are less ethnically oriented than those who live clustered, need careful and detailed examination. Previous studies of ethnic residential patterns and their relation with assimilation are often based on census data (Duncan and Lieberson, 1959; Darroch and Marston, 1971; Guest and Weed, 1976; Golant and Jacobsen, 1978; Balakrishnan, 1976, 1982). Although the census has provided a convenient source of data, it cannot reflect people's "thinking". For a better understanding of the relationship between ethnic residential patterns and assimilation we should not only know the statistical association between the two but should also investigate the "meaning" underlying the statistical association. In other words, we *should* examine people's *decision-making* processes involved in their residential locational choices and what their life-styles are like.

The purpose of this thesis is to use a case study to examine whether ethnic residential dispersal is associated with a diminution of ethnic identity. The Chinese in Edmonton will be the subject population. They were selected for two reasons. First, the Chinese are one of the largest ethnic groups in Edmonton (Statistics Canada, 1991). However, no previous study has been done on their process towards assimilation. Second, the author herself is Chinese and consequently very interested in how her own people adapt to a new society. The population in the present study are the overseas-born Chinese. According to the 1986 Census, on the national level, 74.1 per cent of the people of Chinese ethnic origin are immigrants (foreign-born). It is assumed that the process towards assimilation of the foreign-born Chinese would be very different from the Canadian-born Chinese. The foreign-born and Canadian-born Chinese are not a homogeneous group and therefore worthy of separate studies about their residential pattern and ethnic maintenance. This study will focus on the foreign-born Chinese who are also the majority of the Chinese with Chinese ethnic origin in Edmonton.

Most of the Chinese in Edmonton live dispersed throughout all parts of the city (City of Edmonton, 1978(a); Lai, 1988). However, a substantial number live clustered in the Chinatown area (detailed information about the Chinese residential distribution is in Chapter 2). For the purpose of this study, the Chinese in Edmonton are divided into two groups: Chinatown dwellers and suburban dwellers. The general goal is to examine whether the two groups maintain the same degree of ethnic identity. If the argument that ethnic residential dispersal is associated with weakened ethnic identity is correct, the suburban group is expected to be less ethnically oriented than the Chinatown group. In terms of everyday living, a lesser degree of ethnic identity means the suburban group may not be as strongly attached to Chinese cultural traits as the Chinatown group. The use of the language, meals, entertainment, friends and social affiliations will be examined to determine the differences between the two groups.

Before examining the two groups' maintenance of ethnic identity, one has to understand first why people of the two groups live where they do and to establish the socio-demographic characteristics of the two groups. Each may account for their different residential locational choices and different degrees of ethnic maintenance. This will be the first objective of our study. In order to achieve the first objective, two steps will be followed:

(1) Establish the difference between the two groups in how they perceive the relative importance of some residential locational factors. The factors examined include the socioeconomic factor "financial ability to pay rent/mortgage"; the ethnic factor "closeness to friends/relatives" and the life-cycle stage factors "dwelling space", "general access to the other parts of the city", "closeness to workplace", "closeness to children's school" and "pleasant neighborhood".

By this first step, it will be shown whether the life-cycle stage is the major factor influencing their residential locational choices. If the results show that the stage in the life-cycle is the major factor in the decision of where Chinese people choose to live, then the previous argument that "residential dispersal indicates assimilation" is of questionable value. Since Chinese residential dispersal is "forced" by stages in the life-cycle it does not indicate that the Chinese necessarily want to cut their ties with other Chinese.

(2) Examine the two groups' socio-demographic characteristics which may account for their different residential locational choices. The variables examined include "age" and "marital status" which are related to people's life-cycle stage, "educational level", "employment status" and "income" which are related to people's socioeconomic status; and "age when arrived in Canada", "length of stay in Canada" and "proficiency in Chinese and English" which are related to people's assimilation status.

The above socio-demographic variables used in the present research are based on Nann's (1970) study. However, the two set of variables are not completely the same due to their different purposes. The present study focuses on investigating whether the Chinatown group and the suburban group maintain the same degree of ethnic identity. Therefore, more variables which may provide a better understanding of assimilation and ethnic maintenance are added. This include "length of residence in Canada", "ability in English" and "Chinese schooling" (in addition to Nann's variables of ability in Chinese and English schooling). Due to a serious concern about the length of the questionnaire, such variables relating to stages in the life-cycle, "presence of children in home aged 6 to 12" and "presence of children in home under 6 years of age", were not included in the questionnaire. Instead, we only asked about marriage status. Through this step, socio-demographic profiles will be provided for a better understanding of people's residential locational choices and why or why not the two groups maintain different degrees of ethnic identity.

The second, and the major objective, of the study is to examine if the Chinatown group and the suburban group differ significantly in their degree of maintenance of ethnic identity. The areas examined are:

(1) Maintenance of cultural aspects. The variables tested include language used at home, dietary preferences, Chinese festivals celebrated, Chinese games played, frequency of reading Chinese newspapers, frequency of reading Chinese books/magazines, frequency of listening to Chinese radio, frequency of watching Chinese TV and frequency of borrowing/renting/purchasing Chinese videos.

(2) Connection with homeland. The variables tested include whether or not there are relatives in the homeland, frequency of contacts with relatives and frequency of visiting homeland.

(3) Ethnic maintenance on the secondary level. The variables tested include the number of the respondents who are self-employed, the number of the respondents who have Chinese employers and the number of the respondents whose customers are Chinese.

(4) Ethnic maintenance in social networks and primary interactions. The variables tested include participation in Chinese organizations, ethnic origin of the respondent's best friends and attitude toward Canadians.

The statistical technique used here is Chi-square (χ^2). If there is no statistically significant difference between the two groups in a particular variable, then the two groups maintain the same degree of ethnic identity. If a statistically significant difference is revealed in a particular variable, for example, in membership of Chinese organizations, the step followed will be to examine which group is more involved in the Chinese community and thus maintains a stronger ethnic identity and is less assimilated. Through these analyses, we try to establish whether ethnic residential dispersal is associated with assimilation and diminished ethnic identity.

1.8 Organization of the Thesis

The thesis consists of six chapters. Chapter 1 reviewed the background literature and outlined the objectives of the study. The literature review mainly focused on two topics: the assimilation theories and the relationship between ethnic residential segregation and dispersal and the assimilation process. Chapter 2 offers background knowledge of the subject population-the Chinese in Edmonton. The Chinese immigration history and recent Chinese immigration to Canada will be examined. Also discussed in this chapter are the evolution of the Chinese community and its institutions, Chinese socio-demographic characteristics and the spatial distribution of the Chinese in Edmonton. Chapter 3 introduces the survey design and implementation and describes the questionnaire. Chapters 4 and 5 are the data analysis which comprise the major part of the thesis. Chapter 4 has two concerns. It examines how the two groups perceive the relative importance of seven residential locational factors which relate to the stages in the life-cycle, socioeconomic status and ethnic identity. It also examines the two groups' socio-demographic characteristics which provide a context for a better understanding of people's residential locational choices and why or why not the two groups maintain different degrees of ethnic identity. Chapter 5 compares the group differences in the maintenance of ethnic identity in the following four areas: ethnic maintenance in cultural aspects; connection with homeland; ethnic maintenance on secondary level and ethnic maintenance in primary interactions. Chapter 6 which is the conclusion of the thesis, summarizes the research findings, points out the limitations of the study and provides suggestions for future research.

Chapter 2. The Chinese in Edmonton

This thesis is a case study of the Chinese living in Edmonton. Before examining their ethnic maintenance a description of what the Chinese in Edmonton are like will be provided. The purpose is to offer some background information about the study population. The following areas will be discussed in this chapter: the history of Chinese immigration to Canada; recent Chinese immigration to Canada; the Chinese community and institutions in Edmonton; Edmontonian's and the Chinese demographic and socioeconomic characteristics and the Chinese residential distribution in Edmonton.

2.1 The History of Chinese Immigration to Canada

The Chinese form one of the major minority groups in both Canada and Edmonton. According to the 1991 census, Chinese people (Chinese ethnic origin) are the fourth largest minority in Canada after the French, Germans and Italians. They are also the fourth largest minority group in Edmonton after the French, Germans and Ukrainians. Not only large in size, the Chinese also have a long immigration history to Canada. According to the changes in the immigration law, Chinese immigration to Canada can be divided into several periods (Baureiss, 1987:18). They are: (1) Free Entrance Period (1850s-1884); (2) Head Tax Period (1885-1922); (3) Prohibition Period (1923-1946); (4) Relaxation Period (1947-1966); (5) Point System Period (1967-present).

The earliest Chinese immigrants came to Canada in 1858 (Li, 1988:11). In that year, a few hundred Chinese came from California to join in the Fraser River gold rush. There they worked as miners. Thereafter more Chinese labourers were shipped under contract to British Columbia directly from Hong Kong. By 1880 the number of Chinese was around three thousand. During the period 1880 to 1884, over 16,000 Chinese were brought to Canada under the "contract labour" system (Chan, 1983:43-45). These people worked on constructing the Canadian Pacific Railway in British Columbia (Baureiss, 1987:18). Many of them stayed after the CPR was completed.

The increase in the number of Chinese caused panic. Due to the ideology of white superiority, the Chinese were seen as culturally and racially remote, uncivilized, unable to be assimilated and in a word a "yellow peril" (Palmer, 1965:32). On the other hand, their cheap wages made white workers feel threatened and this caused even stronger hostility (Tan, 1987:81). Discrimination against Chinese was translated into legislative control. Between 1895 and 1923, a series of restrictive laws were passed demanding a head tax from Chinese immigrants (Baureiss, 1987:18; Lai, 1971:121). This tax increased from $50 per head in 1885 to $100 in 1900 and reached $500 in 1904. However, this did not stem the flow of immigrants. During the period 1904 to 1923, 40,000 Chinese arrived in Canada (Ma, 1979:37).

The restrictions on Chinese immigration reached its climax in 1923 when the Chinese Immigration Act (which was also known as the Exclusion Act) was passed. Under this exclusion act, all Chinese except diplomats, merchants and students were prohibited from entering Canada; no Chinese could bring their spouses with them when entering the country (Ma, 1979:39). The Exclusion Act was effective between 1923 to 1947. During this period only about forty Chinese were allowed to enter Canada (Ma, 1979:39).

The Chinese Immigration Act of 1923 was repealed in 1947 (Baureiss, 1987:19). However, not much changed. Before 1962, Chinese could come to Canada only as close relatives of a Canadian resident (Lai, 1971:122). In 1962 racial and national preferences were at least officially abolished. The Chinese could enter Canada as independent immigrants for the first time (Baureiss, 1987:19).

The Immigration Act of 1967 marked a fundamental change in Canadian immigration law. It explicitly stated that there would be no discrimination on grounds of race, colour or religion (Richmond, 1967:19). Immigration was linked to the labour market for the first time. The universal point system was used as the selection criteria and it emphasised the economic and educational backgrounds of the immigrants (Baureiss, 1987:19).

The dramatic change in the Canadian Immigration Act of 1967 had two significant effects on immigrants' assimilation. First, human rights were recognized. Everybody, regardless of race and ethnic origin were to be treated equally officially. Therefore the hostile social environment to the Chinese began to be relaxed and the Chinese no longer needed to isolate themselves from the host society. Second, the new immigration law greatly changed the composition of the Chinese immigrants. Most Chinese immigrants entering Canada after 1967 were very different from those before 1967 and especially those before 1923 in terms of origin, wealth, education, occupation, aspirations and motives (Lai, 1988:106). Before the Exclusion Act of 1923, Chinese immigrants in Canada were predominantly peasants from the southern coastal province of Guangdong in China (Wickberg, 1982:7). Under population and land pressures they left China and came to

Canada to make a living. Unable to speak English and without any idea of urban culture and western society, they were as complete strangers (Lai, 1988:106). Their social lives were mainly confined to interactions with their fellow countrymen. They projected an image of "sojourners" (Baureiss, 1987). Nearly all of them planned to go back to China as soon as they had saved enough money for their families.

In contrast, post-1967 Chinese immigrants came from many places throughout the world, including Hong Kong, China, Taiwan, Malaysia, Singapore, Brunei, Britain and some Caribbean countries (Wickberg, 1982:246). Many of them were independent immigrants and were admitted according to educational background, occupational skill and knowledge of English. They came to Canada to look for a better future for both themselves and their children (Lai, 1988:106). Unlike their pioneers, most of the post-1967 Chinese immigrants intended to stay in Canada. For example, most Hong Kong immigrants worried that after Hong Kong 's return to Communist China in 1997 they might lose their freedom (Lai, 1988:107). Chinese living in Southeast Asia were discriminated against by the local people. As a minority group, the Chinese did not have political power although they were dominant in the economies of the Southeast Asian countries (Wickberg, 1982:250). All these situations forced Chinese people in Hong Kong and Southeast Asia to emigrate and Canada became one of their destinations after the relaxation of the immigration laws.

Since 1970, there has been two significant Chinese immigration waves. One is the inflows of Indo-Chinese Refugees. These "boat people" were of different nationalities, but among them Vietnamese Chinese was the largest group. They left because of ethnic persecution by the Vietnam government after China and Vietnam became involved in a regional conflict (Rpgers, 1980:53). Until the mid-1980s, such Indo-Chinese "boat people" constituted the largest single group of immigrants admitted into Canada under the massive humanitarian refugee programs. These people are generally poor, with only a little knowledge of English, a disrupted education and few skills (Johnson, 1992:162). The second significant Chinese immigration wave was, and continues to be, the influx of immigrants from Hong Kong. Because of the settlement between the British and Chinese government over the future of Hong Kong and the claim of Chinese sovereignty over the territory in 1997, large numbers of Hong Kong immigrants have moved to Canada.

Today, the Chinese immigrants in Canada are no longer a homogeneous group like their predecessors before the Second World War. Rather they form several subgroups in terms of their origin, wealth and educational levels. They include affluent Hong Kong immigrants and the poor Vietnamese Chinese refugees. In addition to the first generation Chinese immigrants, the Canadian born Chinese have become a very important part of the Chinese community. It can be predicted that in the future they will be more involved in the economic, political and social life of Canadian society than was the case of their parents which, in turn, will benefit the whole Chinese community. The second generation Chinese also will have a great impact on their parents' assimilation. By speaking English at home, talking about school life and sports to their parents, they will function as a bridge which links their parents and the Canadian society. As a result, the assimilation of their parents is likely to be accelerated.

2.2 Recent Chinese Immigration to Canada

There has been a large inflow of Chinese immigrants since the mid-1980s. Traditionally Hong Kong, China and Taiwan are the top three major sources of Chinese immigrants (Lai, 1988:106). Table 2.1 provides information on the number of Chinese immigrants from these three countries since 1985[1]. It shows that Hong Kong immigrants account for 70.5% of the total immigrants from these three countries. Table 2.1 also shows that over the seven year period, the average proportion of Chinese immigrants from these three countries out of total number of immigrants to Canada is 15.5 per cent, with the highest, 19.1 per cent, in 1990. Nearly one out of every five immigrants to Canada is now of Chinese origin. In this sense, the Chinese have formed one of the largest immigrant groups to arrive in Canada. In fact, Hong Kong topped the ten major source countries from 1987 to 1991 (Employment and Immigration Canada, 1985-1991). China ranked tenth in 1989, eighth in 1990 and third in 1991.

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[1] After 1967 the Canadian government ceased to identify the ethnic origins of immigrants in immigration statistics. Instead they list the country of their last permanent residence. In statistics an "immigrant from Hong Kong" merely indicate that the immigrant was a permanent resident of Hong Kong before he/she migrated to Canada. His/her race can not be identified. Therefore, the exact number of Chinese immigrants coming into Canada each year after 1967 is not known. However, it still can be said that most of the immigrants coming from Hong Kong, Taiwan and China are of Chinese origin.

Table 2.1 Number of Immigrants from China, Hong Kong and Taiwan by Country of Last Permanent Residence and Year of Landing: 1985-1991

Year	China	Hong Kong	Taiwan	Total	% of total immigrants 11.6 to Canada
1985	1,883	7,380	536	9,799	11.6
1986	1,902	5,893	695	8,490	8.6
1987	2,625	16,170	1,469	20,264	13.3
1988	2,778	23,281	2,187	28,246	17.4
1989	4,430	19,908	3,388	27,726	14.4
1990	7,989	29,261	3,681	40,931	19.1
1991	13,915	22,340	4,488	40,743	17.7
Total	35,522	124,233	16,442	176,197	15.5
% of total Chinese immigrants from these three countries	20.2	70.5	9.3		

Source: Employment and Immigration Canada, *Immigration Statistics*, 1985-1991.

Chinese immigrants from China, Hong Kong and Taiwan are not only different in number, they are also different in terms of class composition. Table 2.2 shows that "family", "other independent" and "assisted relatives" topped the major three classes for China. "Other independent", "family" and "entrepreneurs" topped the major three classes for Hong Kong, while "entrepreneur", "investor" and "other independent"[2] topped the major three classes for Taiwan. According to Immigration Canada's definition of class, "entrepreneur", "self-employed" and "investor" belong to the business immigration category so that 63.8 per cent of the Taiwan immigrants are "business immigrants". This percentage is 25.2 per cent for Hong Kong and only 0.4 per cent for China. This information shows that the immigrants from Taiwan are the richest among the Chinese immigrants.

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[2] In the Immigration Statistics published by the Employment and Immigration Canada, the "other independent" category includes "selected workers", "retirees" and "refugees under the special designed program". The "refugee" category in the Immigration Statistics only refers to the "conventional refugees".

Table 2.2 Percentage of Immigrants from China, Hong Kong and Taiwan to Canada by Class: 1985-1991.

	China	Hong Kong	Taiwan	Total Chinese immigrants	Composition total immigrants to Canada
Family	48.5	22.3	13.2	26.7	35.8
Refugee	3.0	0.2	0.0	0.8	18.9
Assisted Relative	9.1	6.3	2.8	6.5	9.7
Entrepreneur	0.4	19.2	35.7	17.0	5.8
Self-employed	0.0	0.8	1.1	0.7	1.3
Investor	0.0	5.2	27.0	6.2	1.1
Other Independent	38.6	45.9	20.1	42.0	27.4
Total number of immigrants	35,522	124,233	16,442	176,197	1,135,280

Source: Employment and Immigration Canada, *Immigration Statistics*, 1985-1991.

In addition to the above differences, the class composition for China is much more concentrated than that for Hong Kong and Taiwan. The "family" and "other independent" classes together account for 87.1 per cent of the total immigrants from China. The class compositions of Hong Kong and Taiwan is more similar than those of Hong Kong and China or Taiwan and China. This situation indicates that the Chinese immigrants from Hong Kong and Taiwan have more similar backgrounds than those from China.

Table 2.2 also provides a comparison between the class composition of Chinese immigrants from China, Hong Kong and Taiwan and that of the total immigrants to Canada.

The Chinese immigrants are well under-represented in the "refugee" category. They are also under-represented in "family", "assisted relative" and "self-employed" class. The Chinese immigrants are over-represented in "entrepreneur", "investor" and "other independent" classes. The *Immigration Statistics* (Employment and Immigration Canada, 1988) shows that independent immigrants are usually better educated than the immigrants of "family" and "refugee" classes. Therefore, generally speaking, the Chinese immigrants are a better educated group than the total immigrants.

Perhaps the most significant feature of recent Chinese immigration is the proportion of Chinese business immigrants, most of whom originate from Hong Kong and Taiwan. Between 1985 and 1991, the business immigrants from Hong Kong and Taiwan made up 44.9 per cent of the total business immigrants to Canada. Among the business immigrants, Hong Kong and Taiwan's entrepreneurs contained 45.1 per cent of the total entrepreneurs to Canada and the investors from these two areas contained 87.3 per cent of the total investors arriving in Canada. In fact, ever since 1986 when the "investor" category was created, Hong Kong has been the leading source of investors. Taiwan followed Hong Kong as the second major source of investors. Although the absolute number of Chinese immigrants in the "investor" category is small compared to other categories such as "family" class and "other independent" class, the money they brought has greatly shaped the image of Chinese immigrants. The significance of the amount of money is far beyond that of the absolute number of people.

2.3 The Chinese Community and Institutions in Edmonton

The Chinese in Edmonton have developed a high degree of institutional completeness. These institutions cover a number of areas of their economic and social lives. Like other cities in Canada, the Chinese community as a whole has experienced growth, decline and revival. The earliest Chinese immigrants settling in Edmonton is believed to be 1892 (Lai, 1988:92). By 1911 the Chinese population had grown to 130 and this number increased to 500 in 1921 (Lai, 1988:92). After 1923 the Chinese population began to decline. By 1941 there were only 384 Chinese in Edmonton. After the change in the immigration law in 1967, the Chinese began to increase rapidly. By 1986, there were 21,680 Chinese of single Chinese ethnic origin[3] in Edmonton (Statistics Canada, 1986) and this number had increased to 32,960 in 1991 (Statistics Canada, 1991). During the process of community development, some old institutions declined while some new ones boomed. The evolution of Chinese institutions reflects both the changes in composition of the Chinese immigrants themselves and the changed attitudes towards the Chinese by the host society.

The development of Edmonton's Chinese community can be divided into two by the Second World War. Before the Second World War the Chinese community were confined to Chinatown. Except for some domestic servants and laundrymen most Chinese residences were located in Chinatown which was in the Boyle Street area (Lai, 1988:7). All the Chinese institutions were confined to Chinatown too.

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[3] In the 1986 and 1991 census, a single ethnic origin means that the respondent indicates that he/she belongs to only one ethnic origin. For example, in 1991, 32,960 persons in Edmonton gave Chinese as their only ethnic origin while 3,310 gave Chinese as one of their ethnic origins.

The major institutions in Edmonton at that time included a community association-the Chinese Benevolent Association (which was established in 1932), some political associations, such as Chikongtong and the Chinese Nationalist League (both of which were established in the 1920s); some clan and locality associations, such as the Mah association, Gee Association, Wong Society and Lee Association, and some churches, such as the Chinese United Church (Wickberg, 1982:224).

The Chinese Benevolent Association was the first formal community-wide Chinese association in Canada (Wickberg, 1982:39). It was a type of umbrella organization (Lai, 1988:7). Edmonton's CBA was one of its branches. It played a governing role in the Chinese community. The major functions of this organization included settling internal conflicts within the Chinese community, dealing with discrimination from the host society (Lai, 1988:7) and providing financial aid to the poor (Wickberg, 1982:39). However, the power of Edmonton's Chinese Benevolent Association was never as important as the branches in Vancouver, Toronto and Calgary (Wickberg, 1982). The clan and locality associations also had welfare functions. In addition, they were responsible for providing recreational facilities and lodging places for their members who were mainly "single" male (Wickberg, 1982:78). Like Edmonton's Chinese Benevolent Association, both of the two political associations were also branches of their Canadian wide organizations. However, the focus of these two Chinese political organizations was not on the Canadian scene. Rather it was towards politics in China.

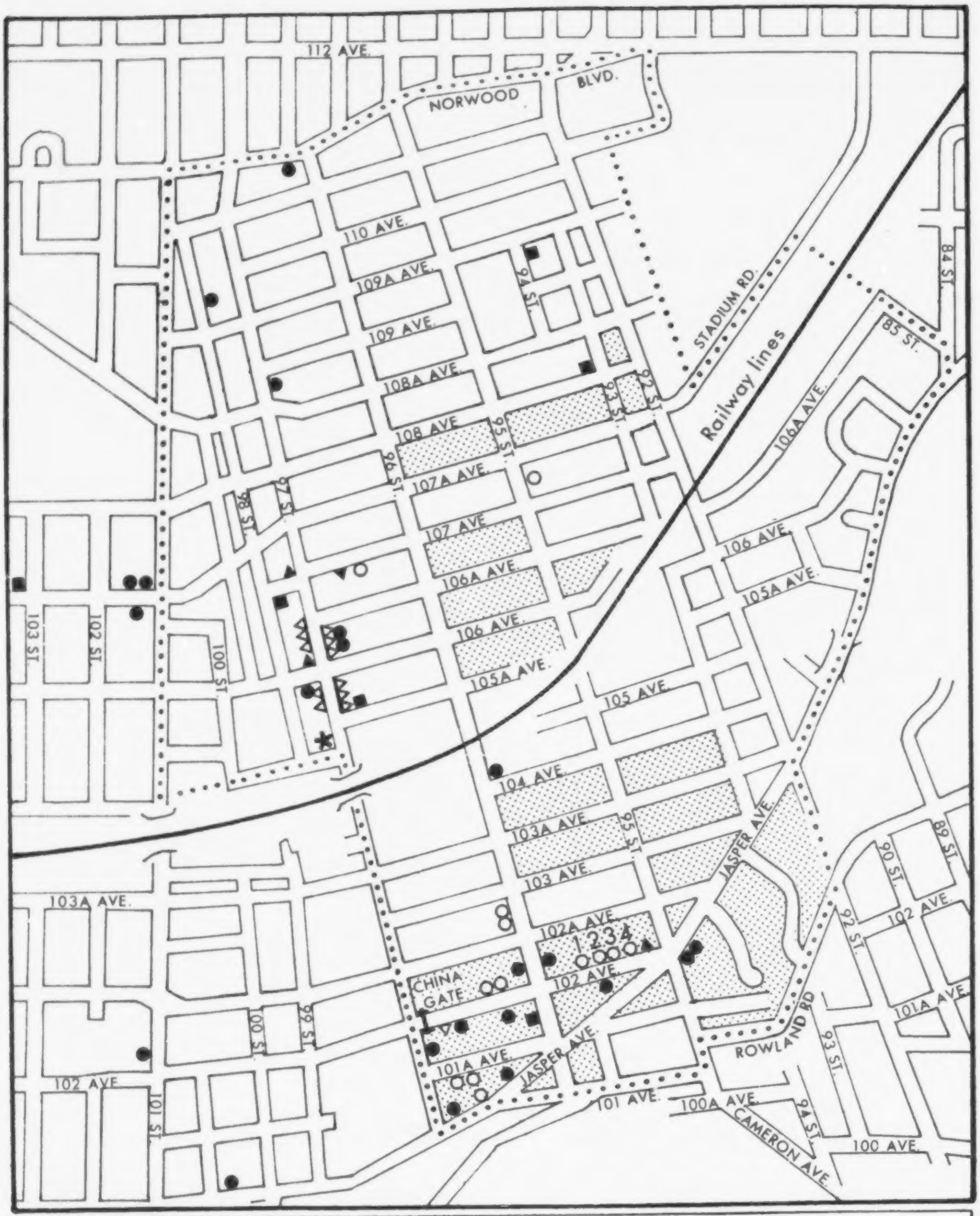
After the Second World War and especially after 1967, the social environment became less hostile towards immigrants. The Chinese were no longer officially discriminated against. New types of immigrants came to Canada. The host society even began to take pride in its ethnic diversity and began to recognize the contributions, as well as the suffering, of the Chinese in Canada. Under this situation both Chinatown and the Chinese institutions underwent substantial changes. The Chinese community was no longer confined to Chinatown. Both the residences and new Chinese institutions became dispersed throughout the city. On the other hand, Chinatown itself experienced a depopulation and decay. By the end of the 1950s most remaining residents of Chinatown were elderly single males who were a remnant of the old "bachelor society" (Lai, 1988: 123).

Accompanying depopulation in Chinatown was a decline in the old type of institutions. All of the above institutions reflected the social needs of an isolated "bachelor" society as well as the specific political and social environment both in Canada and in China. With the influx of new types of immigrants and disappearance of "bachelor" society, these institutions were no longer appropriate for the new immigrants.

Even though Edmonton's Chinatown experienced depopulation and physical deterioration in the fifties and the sixties, when its vitality and community interest was threatened, the Chinese community demonstrated group solidarity and took action against those threats. For example, in 1968 the Federal Government was planning to consolidate its offices in the area which would result in the elimination of some Chinese stores and restaurants. The Chinese Benevolent Association immediately appealed to both the Federal and Municipal governments to keep Chinatown alive within any urban renewal program (Lai, 1988:139).

Today, Edmonton's Chinatown includes two major sections. One is in the area along 97th Street and between 105A and 107 Avenue, where Chinese businesses, including restaurants, grocery stores, bakeries, bookstores, hair salons and trading companies are concentrated. The other section which is in a triangular area bounded by 97th St, 102A Ave and Jasper Avenue, includes a number of Chinese institutions such as the Edmonton Chinese Multicultural Center, Chinese Elder's Mansion, the Chinese Bilingual Day Care Center as well as some Chinese grocery stores and restaurants. There is a Chinagate at the intersection of 97th Street and 102nd Avenue which is the focal point of Chinatown (See Figure 2.1).

The vitality of Chinatown is an index of the vitality of the Chinese community. Chinatown may be considered as a symbol of the Chinese. It serves as an expression of Chinese culture in the overall multicultural context and bears witness to the Chinese contribution to the Canadian society.



112 AVE.
NORWOOD
BLVD.
110 AVE.
109A AVE.
109 AVE.
108A AVE.
108 AVE.
107A AVE.
107 AVE.
106A AVE.
106 AVE.
105A AVE.
105 AVE.
104 AVE.
103A AVE.
103 AVE.
102A AVE.
102 AVE.
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100 AVE.
103A AVE.
102 AVE.
106A AVE.
106 AVE.
105A AVE.
102 AVE.
101A AVE.
STADIUM RD.
Railway lines
JASPER AVE.
ROWLAND RD.
CAMERON AVE.
CHINA GATE
1 2 3 4
84 ST.
85 ST.
89 ST.
90 ST.
92 ST.
93 ST.
94 ST.
95 ST.
96 ST.
97 ST.
98 ST.
99 ST.
100 ST.
101 ST.
102 ST.
103 ST.

Fig. 2.1 Edmonton's Chinatown

● Restaurant
▲ Grocery store
△ Other businesses
★ Business complex
○ Organization
■ Church
1,4 Chinese elder's mansion
2 Chinese daycare centre
3 Chinese multicultural centre
▨ The enumeration areas where Chinese residents number over eighty

As mentioned above the post-war Chinese community extends far beyond the area of Chinatown. New types of Chinese immigrants brought in new types of institutions. Most of these institutions are Chinese businesses (See Table 2.3). These businesses create job opportunities for Chinese immigrants and provide all sorts of services which are needed by the Chinese such as Chinese grocery stores and restaurants. However, many of the services, such as the moving companies and the real estate agencies, are not intended to serve the Chinese only.

Chinese cuisine is a very important part of the Chinese culture. Chinese restaurants are the major places where Chinese people socialize informally. During holidays, families, relatives and friends gather together in the Chinese restaurants. The function of Chinese restaurants for Chinese, and to some extent the Canadians who eat there, is more like bars for westerners. A lot of Chinese restaurants have installed Karaoke equipments. Karaoke is one of the most popular entertainment styles in Hong Kong, Taiwan and China. During the evening usually from 9pm to 1am (3am on weekends), people can choose their favourite songs and sing in front of the audience, with a screen to prompt the towards and a sound system to play accompanying music. Figure 2.1 and 2.2 show that many restaurants are still located in Chinatown. However, a lot of them are dispersed throughout the city. The dispersion of Chinese restaurants makes it rather easy for the dispersed Chinese population to continue to practise their ethnic life-styles. The Chinese need not only go to Chinatown for Chinese cuisine and Karaoke. They have easy access to what they want throughout the city. The dispersion of Chinese restaurants will have positive influence on the maintenance of ethnic identity.

Table 2.3 Types of Chinese Business Institutions in Edmonton

Business Types	Food and Grocery	Grocery Stores Bakery Barbecue Restaurants
	Other Retail Stores and Companies	Electronic Stores Department Stores Fashion Stores Flower Shops Funeral Parlour Jewelry Photo Studio and Services Beauty Salon Video Shop
	Financial, Banking and Investment	Accounting Bank Insurance Company Investment Real Estate
	Medical Services	Acupuncture and Moxibustion Physician (clinic) Dentist Optician Chinese Materia Medica
	Other Services: Auto Dealer and Services, Advertising, computing, Construction, Day Care Center, Driving School, Lawyer, Moving Company, Manufacturing, Signs, Travel Agency, Theatres	

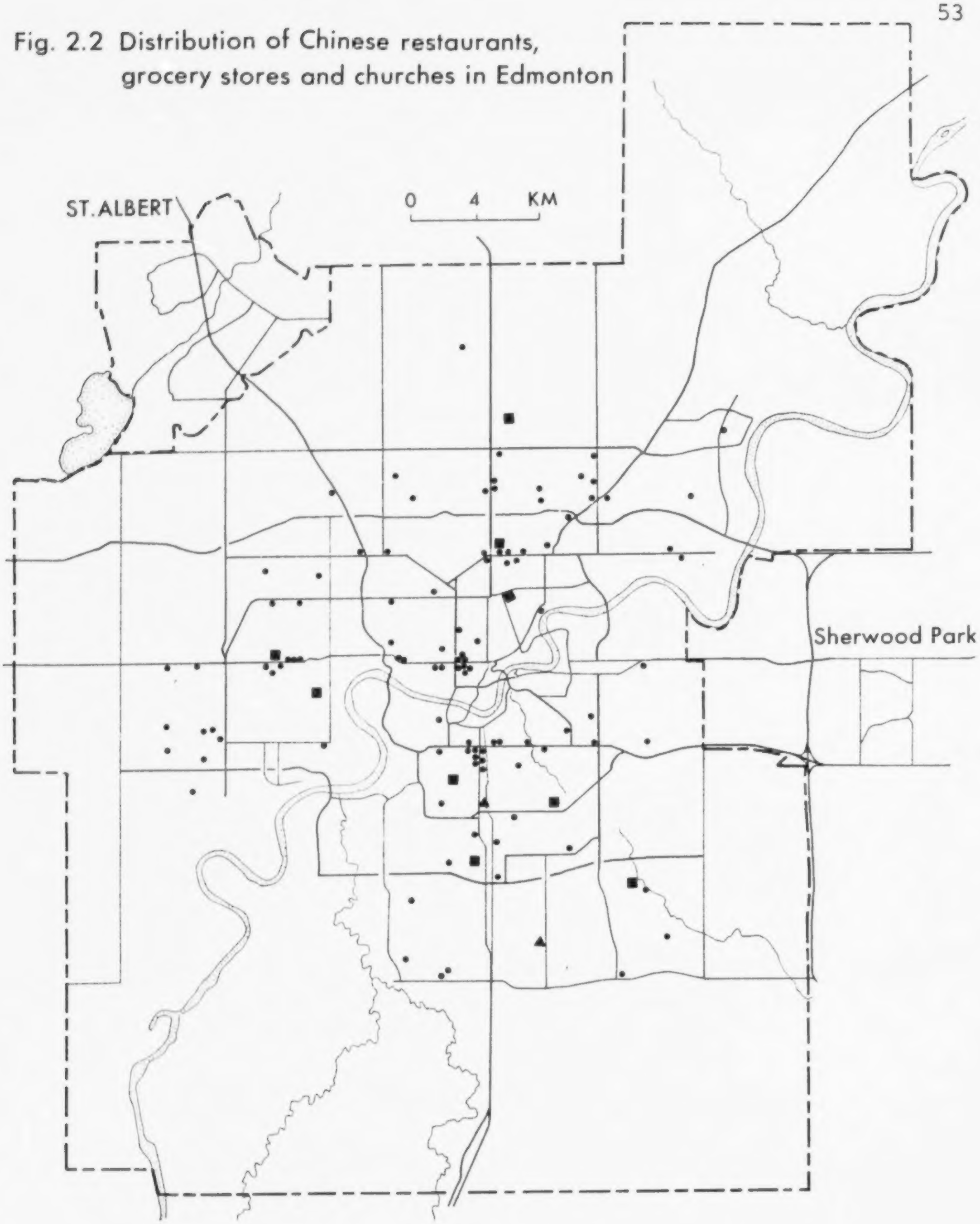
Source: Compiled from the *Canadian Chinese Times*, 1992.

There are two major grocery stores outside Chinatown which mainly sell Chinese groceries. One is on South Calgary Trail, the other is near Millwoods. These two grocery stores are very conveniently located for Chinese people living in the southern area. In addition to these two Chinese grocery stores, there are around forty (Chinese Telephone Directory, 1993) small grocery stores dispersed all over the city which are owned by Chinese. These grocery stores do not cater solely for the Chinese. However, some of them have several Chinese items in the stores.

The social role of Chinese churches as a religious institution is not as important as that of Chinese restaurants. However, it is still an important part in the lives of Chinese. There are fourteen Chinese Christian churches in Edmonton. The services are either in Cantonese, Mandarin or English, with some churches in two of these languages, and some in all of them. Five of the churches are located in Chinatown. The other nine are dispersed throughout the city. More important, all denominations are represented in the suburbs. The dispersion of Chinese churches also makes it easier for the dispersed Chinese people to socialize with each other.

According to Breton (1964), ethnic publications have one of the most important effects on the immigrant's interpersonal network. The ethnic communities which provide ethnic publications have proportionally more individuals with a majority of their relationships within the ethnic group. As an extension of this argument it is to be expected that all ethnic media will play an important role. In Edmonton there are three Chinese newspapers. They are the Canadian Chinese Times, the Alberta Chinese Times and the Edmonton Chinese Times. The major function of all the three newspapers is to provide advertisements

Fig. 2.2 Distribution of Chinese restaurants, grocery stores and churches in Edmonton


ST. ALBERT
0 4 KM
Sherwood Park

• Restaurant ▲ Grocery store ■ Church

for Chinese businesses and non-business institutions. They also include news from Hong Kong, China, Taiwan and Canada as well as world news. The three newspapers are published once a week and are free of charge. They are put into many Chinese restaurants. In addition to newspapers there are four radio stations. Two of them broadcast in Cantonese and the other two broadcasts in Mandarin. These radio stations mainly broadcast news and popular Chinese songs.

In summary, the Chinese community and its institutions have gone through a series of changes with the changes in the Canadian immigration regulations. Before 1947, the Chinese community was spatially confined to Chinatown. The major institutions were some welfare, clan and locality associations which served the needs of the "Bachelor Society". After 1947, especially after 1967, the influx of educated new types of Chinese immigrants and an atmosphere of growing tolerance towards immigrants generally, greatly shaped the Chinese community. The Chinese are now living scattered throughout the suburbs. New types of businesses and institutions emerged to provide services for the new and growing Chinese community. These institutions and businesses are no longer confined to Chinatown. Rather, they are dispersed to serve the dispersed population and in turn, this enhances group solidarity.

2.4 Demographic and Socioeconomic Characteristics

The socio-demographic features of the immigrant groups have been predetermined to a large extent by the criteria used in the selection process. On the other hand, these characteristics will also affect where they are going to live and how they are going to be integrated into this society. In this section the age, sex, marital status, census family characteristics, educational status, occupation and income of the Chinese in Edmonton will be discussed. The statistics on which the discussion is based are from 1986 census publications for Edmonton and the Public Use Sample Tape (Individual Files) for Chinese. Here the Chinese refers to people with a single Chinese ethnic origin. As discussed earlier in Section 2.1 and 2.2, people of Chinese origin are not a homogeneous group in terms of their origin, wealth and educational levels. Each subgroup's (such as Chinese from Hong Kong, Chinese from China and Chinese from Vietnam) own socio-demographic characteristics will have either a positive or a negative impact on their assimilation process. However, no specific socio-demographic statistics are available for each subgroup in Edmonton. In this section, the statistics are for all Chinese. They do not indicate the situation for a particular Chinese sub-group.

2.4.1. Age Distribution

The age distribution of the Chinese in Edmonton and of the whole city population is presented in Table 2.4. In general, the age distribution of the Chinese parallels that of the whole city. However,the Chinese are over-represented in the age groups 0-4 years, 20-24 years and 35-44 years. They are under-represented in age groups 10-14 years, 15-19 years, 45-54 years and 55-64 years. The under-representation of the Chinese in the age groups 10-14 years and 15-19 years indicates that the Chinese have a smaller proportion of school-age children relative to the city's population. The over-representation of the Chinese in the age groups 0-4 years, 20-24 years, 25-34 years, 25-34 years and 35-44 years and their under-representation in 45-54 years and 55-64 years all indicate that proportionately more Chinese households are "younger" in terms of the age of the household heads and presence of young children, than the city's corresponding groups. According to Rossi (1980:124), young households are residentially more mobile. Thus, the data in Table 2.4 may imply that the Chinese in Edmonton have potentially a higher degree of residential mobility than Edmontonians.

Table 2.4 Age Distribution of Edmonton's Population and the Chinese Sample: 1986

Age Group (years)	Edmonton (%)	Chinese (%)
0-4	8.5	9.5
5-9	7.4	7.4
10-14	7.0	6.3
15-19	7.6	5.3
20-24	10.1	11.6
25-34	21.0	23.0
35-44	14.3	15.3
45-54	9.4	7.4
55-64	7.4	6.3
65-74	4.5	5.3
75 years and older	2.8	2.3
Total	100.0 (N=785,465)	100.0 (N=430)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-107, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.
The Individual File for 1986 census is a 2% probability sample of the total population.

2.4.2 Sex

Before the Second World War the Chinese in Canada were predominantly male (Li, 1980). Although most Chinese males were married before they came to Canada, very few brought their wives with them because of the humiliating social environment and later the restriction law (Li, 1980). The Chinese community became known as the "Bachelor Society".

Post-war changes in Canadian immigration laws enabled the Chinese to sponsor their wives and children. In addition, post-war Chinese immigrants could come to Canada with their families. As a result the sex ratio of the Chinese became more balanced. In 1986 the sex ratio of the Chinese in Edmonton was 110 males per 100 females (Statistics Canada, Public Use Sample Tape, 1986). Unfortunately, crosstabulation data of the sex ratio by age are not available for the Chinese in Edmonton.

2.4.3 Marital Status

The Chinese and the city population have a similar representation in the "widowed" category. The Chinese are under-represented in the "married" and "divorced" categories and are over-represented in the "single" category than the city. The lower divorce rate of the Chinese suggests that the Chinese still respect their traditional family values. However, the over-representation of Chinese in the "single" category and their under-representation in the "married" category is not consistent with the two groups' age composition. The Chinese have a similar representation (40.1 per cent) in the age group 0-24 years as the city population (40.6 per cent). It is expected that the two groups should have a similar proportion in both "single" and "married" (including divorced) categories. However, the city is 6 percentage points lower in the "single" category than the Chinese. No crosstabulation data of marital status by age group is available for either Edmonton or the Chinese so that the above inconsistency cannot be explained. What might be suggested tentatively is that the city may have a larger proportion of persons who are married or become common law couples[4] in their early twenties than the Chinese.

Table 2.5 Marital Status of Edmonton's Population and the Chinese Sample: 1986

	Edmonton	Chinese
Single	44.5	50.5
Married (including separated)	48.3	44.0
divorced	3.6	0.7
widowed	3.6	4.9
Total	100.0 (N=785,465)	100.0 (N=430)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-107, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

2.4.4 Census Family Characteristics

Census family refers to a husband and a wife (with children who have never married regardless of age or without children), or a lone parent of any marital status, with one or more children who have never married, regardless of age, living in the same dwelling (Statistics Canada, 1986, 93-106). Table 2.6 provides information on the census family size of the Chinese and Edmonton. The Chinese tend to have a bigger family size than the city. Four-person and five or more person family comprise 31.6 per cent and 32.2 per cent of the Chinese respectively while it is only 25.2 per cent and 12.8 per cent respectively for the city. The over-representation of the Chinese in the category "5 or more persons" indicate that the Chinese have a larger proportion who have 3 children or more compared to the city (Single parents with four children or more must be extremely rare considering the low divorce rate of the Chinese). Two-person families comprise only 12.8 per cent of the Chinese while for the city it is nearly 40 per cent. The two groups have a similar representation in three-person families.

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[4] In 1986 census, common law couples are also treated as married in their marital status.

Table 2.6 Census Family Size of Edmonton's Population and the Chinese Sample: 1986

Census Family Size	Edmonton (per cent)	Chinese (per cent)
2 persons	38.9	12.8
3 persons	23.1	23.4
4 persons	25.2	31.6
5 or more persons	12.8	32.2
Total	100.0 (N=205,405)	100.0 (N=367)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-107, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

To some degree family size reflects housing needs. However, a more accurate variable would be number of children at home. Unfortunately the Individual File of the Public Use Sample Tape does not provide information on this variable. The only information available is whether or not children are present at home. This information cannot be incorporated into Table 2.7 since the tape does not provide the *number* of children present at home. The data compiled from the Public Use Sample Tape shows that 50.9 per cent of the Chinese census families do not have children at home. For the city, census families with no children at home is 31.6 per cent. This result indicates that compared to the city's population, the Chinese have a larger proportion of families which have no children or possibly whose children have left home.

It should be noted that census family size is not equal to household size. Household size is usually larger than the census family size because a household may include relatives and friends who are not members of that census family. In the case of the Chinese, it is very common for parents to live with their married children and newcomers and their families with their brothers' or sisters' families already in Canada.

2.4.5 Age at Immigration

The majority of the Chinese population in Canada is first generation immigrants. According to Li (1980), the long existence of the "Bachelor Society" inhibited the growth of a second generation of Chinese. Although the post-war immigration pattern brought the Canadian-born Chinese to 31 per cent in 1951 and 40 per cent in 1961, most Chinese are still foreign born (Li, 1980). According to the 1986 census (Statistics Canada, 93-154: 2-28), among the 360,315 people of Chinese ethnic origin, 74.1 per cent are immigrants. Age at immigration will affect the immigrant's integration with the host society. The younger an immigrant is at arrival, the easier he/she will be integrated into the host society. Table 2.7 shows that the majority of Chinese (78.2 per cent) arrived in Canada after they were fifteen years old. This means that most of the Chinese immigrants received their high school education outside Canada. Although they may have received their post-secondary education in Canada, their roots are in their original culture. As a matter of fact, a university degree or college diploma serves more or less like a "pass" on the road to personal success in the Canadian society. The many years of non-Canadian education will have a negative impact on the immigrants' assimilation.

Over 18 per cent of the Chinese immigrants arrived in Canada aged 45 years and over. People in this group are unlikely to be integrated into this society since most of their lives have been spent out of Canada. Their experience and their viewpoints are generally different from Canadians. In contrast to this group, pre-school and lower-grade elementary school children make up only 13.3 per cent of the total Chinese immigrants. These are the ones who are likely to become assimilated. However, they occupy only a small proportion of the first generation Chinese immigrants which suggests that the majority of Chinese may maintain their original life-styles.

Table 2.7 Age at Immigration of the Chinese in Edmonton: 1986

Age Group (years)	Percentage (per cent)
0-4	5.4
5-9	7.9
10-14	8.5
15-19	16.4
20-24	18.6
25-29	12.0
30-34	8.5
35-44	4.4
45-64	15.5
65 years and over	2.8
Total	100.0 (N=430)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-107, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

2.4.6 Education

Table 2.8 presents the highest level of schooling of the population 15 years and over for Edmonton and the Chinese. The Chinese have a much larger proportion in both the categories "less than Grade 9" and "university with degree". This result shows that compared to the city, the Chinese have a larger proportion of people who received only primary education and a larger proportion who completed their university education. The larger proportion (29.2 per cent) of the city in the category "Grades 9-13" does not mean that the city has a larger proportion who "only" received some high school education than the Chinese, since the city has a larger proportion in the age category "15-19 years". Rather it means that the city has a larger proportion who are receiving high school education. Certain numbers of these people will continue their post-secondary education after they graduate high school.

Table 2.8 Highest Level of Schooling of Edmonton's Population and the Chinese Sample: 1986

	Edmonton (per cent)	Chinese (per cent)
Less than Grade 9	9.7	23.0
Grades 9-13	29.2	20.3
Highschool diploma	11.1	10.3
Trades certificate or diploma	2.6	1.2
Non-university education without certificate	7.3	6.4
Non-university education with certificate	18.0	10.9
University without degree	10.2	7.0
University with degree	11.9	20.9
Total	100.0 (N=598,355)	100.0 (N=330)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-108, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

2.4.7 Occupation

Before the Second World War most Chinese in Canada worked as labourers. In Edmonton, for example, the Chinese were either laundryman or small restauranters and grocery store owners (Wickberg, 1982:92). After the Immigration Law was changed in 1967 Chinese immigrants were no longer confined to the lower skilled jobs in the labour market (See Table 2.9)

Table 2.9 Major Occupational Groups in the Labour Force 15 years and over of Edmonton's Population and Chinese Sample: 1986

	Edmonton	Chinese
Managerial, administrative and related	10.9	7.2
Teaching and related	4.3	2.4
Medicine and health	5.3	8.0
Technological and related	8.3	12.4
Clerical and related	20.0	17.7
Sales	10.2	3.6
Service	13.3	26.9
Primary occupations	3.4	0.4
Processing	1.9	2.0
Machining and related	7.4	12.0
Construction and trades	6.7	2.0
Transport equipment operating	3.9	1.2
Other occupations	4.4	4.0
Total	100.0 (N=432,125)	100.0 (N=349)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-108, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

Table 2.9 shows that relative to the city the Chinese are over-represented in medicine and health, technological and related fields, service as well as machining and fabricating occupations. They are under-represented in the managerial, teaching, sales, clerical, primary, processing, construction and transport occupations. These results are similar to the Chinese at the national level (Li, 1987). The over-representation of the Chinese in Medicine and technological areas and under-representation in the managerial area suggests that the Chinese are more interested in the skilled and specialized areas rather than managerial area where verbal skills assume importance. The service industry, particularly food service, has been an important sector for the Chinese in Canada (Li, 1988:116). The over-representation of the Chinese in Edmonton in the service areas shows that the service occupations remains a safe haven for those people without professional or technical qualifications.

2.4.8 Income

The Chinese in Edmonton are generally better off than the average Edmontonian. Table 2.10 shows that relatively more Chinese families occur in the medium to high income range and proportionately less in the low income categories ($20,000 and under). The proportion of Chinese families with high income, $50,000 and over, is nearly seven percentage points higher than that of the city's whole population which shows that the Chinese are financially better off than most Edmontonians.

Table 2.10 The Income Distribution of Edmonton's Population and the Chinese Sample: 1986.

Total Income ($)	Edmonton (per cent)	Chinese (per cent)
Under 5,000	4.6	4.2
5,000-9,000	8.1	4.2
10,000-14,999	7.7	2.6
15,000-19,999	8.9	8.1
20,000-24,999	8.3	8.8
25,000-29,999	8.1	9.1
30,000-39,999	15.9	16.3
40,000-49,999	13.7	15.3
50,000 and over	24.7	31.4
Total	100.0 (N=283,370)	100.0 (N=426)

Source: For Edmonton, Statistics Canada, *1986 Census of Canada*, Catalogue 95-108, Table 1.
For Chinese, Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

2.5 Spatial Distribution of the Chinese in Edmonton

Before the Second World War, the Chinese community was restricted to Chinatown (Lai, 1988). After the war, especially after 1967, with the great influx of Chinese immigrants, the Chinese population began to live dispersed throughout the city (Lai, 1988; Wickberg, 1982; Johnson, 1992). Though more dispersed than the pre-war period, how really dispersed are they?

A common indicator of ethnic residential patterns is the Index of Segregation (Duncan and Duncan, 1955; Timms, 1970).

$$IS = \frac{ID}{1-\frac{\Sigma a_i}{\Sigma n_i}}$$

Where Σn_i is the total population of the city and Σa_i is the total number of the subgroup. ID represents the Index of Dissimilarity between the sub-group and the total population (including the sub-group). The Index of segregation ranges from 0 to 100. The higher the index, the higher the degree of segregation.

An index of 40.1 was calculated for the Chinese in Edmonton using the 1986 Census Tract data. This result was similar to the result of 39.17 for South Asians in Edmonton (Fairbairn and Khatun, 1989). The index of 40.1 is well below the extreme of 90 calculate for Black households in some American cities (Sorenson *et al*, 1975). However, it does indicate that the Chinese population are still segregated though this segregation is not strong.

The Index of Segregation can only reflect the Chinese residential pattern on an aggregate level. It does not indicate where the Chinese are concentrated. A better method is to calculate for each census tract the proportion of Chinese out of the total Chinese population. Then it is possible to determine which census tracts have high percentages of Chinese living in them. The data used in this study is on the census tract level (See Figure 2.3). This measure of concentration is not weighted by the total population of each census tract. In other words, it does not include the effect of the total population size of each census tract on the number of Chinese in each census tract.

The mean value of the proportion of Chinese out of total number of Chinese in Edmonton by each census tract was 0.70 per cent. The proportion of Chinese in each census tract was divided into six classes, with three classes below the mean and three others above the mean. The darker shades in the figure indicate the higher concentrations. The class intervals were obtained in this way: For the three classes below the mean, the mean value (0.70 per cent) was divided by three and this amount (0.23) was used for each class limit; for the three classes above the mean, the mean value (0.70 per cent) was used as the class interval. Although this method is not a perfect way to classify, in a descriptive study such as this, the map reflects where the Chinese are concentrated.

Figure 2.3 shows that the inner city area near Chinatown and the peripheral suburbs have higher proportion of Chinese. However, whether people in these areas are seeking ethnic propinquity is hard to prove at the present stage, because a spatial concentration on the census tract level may not indicate a contiguous spatial concentration on a disaggregated level, such as by street (Waterman and Kosmin, 1987). In other words, if a census tract with a relatively high concentration of Chinese is examined on a street level, it may be found that within the census tract, the Chinese people are quite evenly distributed. In this case, the situation can neither be described as representing segregation nor indicating very high clustering.

However, considering that the inner-city areas with a high concentration of Chinese are the Chinatown area, people living there may have a tendency to seek ethnic propinquity and to take advantage of highly clustered Chinese businesses and institutions. In order to verify this argument, we break CT34, CT44 and CT45 in which the defined Chinatown area is located, into the enumeration areas. There are 22 enumeration areas which fall into the defined Chinatown area[5]. According to the 1986 census, in these 22 enumeration areas, 1,206 were of Chinese origin. There is 62.3% of the total Chinese population of CT34, CT44 and CT45 (Statistics Canada, 1986: CD-ROM). The Chinese population in these 22 enumeration areas was not evenly distributed. Seven out of the twenty-two EAs (shaded area on Figure 2.1) comprised nearly seventy percent (68.5 per cent) of the total Chinese population, with each of these seven enumeration areas contains at least eighty Chinese. It can be found that the shaded area in Figure 2.1 are highly clustered two parts, each of them close to a distinct section of Chinese institutions and businesses. Therefore, it is very likely that people in the Chinatown area are seeking ethnic propinquity.

The reasons for the peripheral concentration of Chinese may be different from that for the inner city concentration, since the outer-suburbs are far away from Chinatown where Chinese institutions and businesses are highly clustered. In fact, the peripheral concentration of Chinese is similar to the distribution of South Asians in Edmonton (Fairbairn and Khatun, 1989). Considering that both groups are mainly first generation immigrants and many of them are families with young children, it might be suggested tentatively that immigrants choose to live in the outer suburbs because that is where housing was available during their initial settlement and/or that is where they feel the environment "suitable" to raise children.

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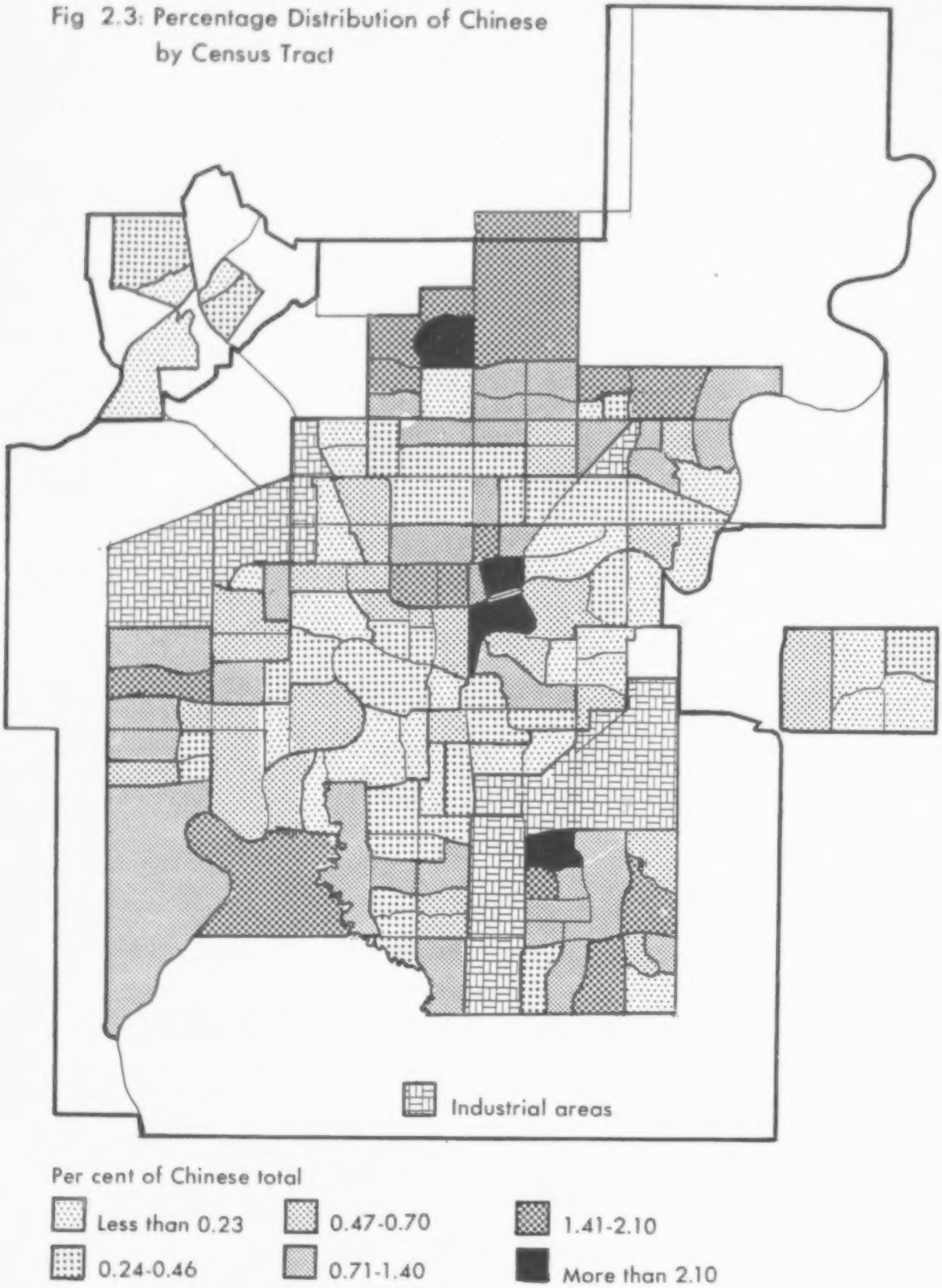
[5] The twenty two Enumeration Areas which located in the defined Chinatown area are: EA 206, 207, 209, 222, 223, 224, 253, 257, 260, 261, 262, 268, 271, 272, 458, 462, 463, 464, 465, 466, 467, 468.

Fig 2.3: Percentage Distribution of Chinese by Census Tract


Industrial areas
Per cent of Chinese total
Less than 0.23
0.24-0.46
0.47-0.70
0.71-1.40
1.41-2.10
More than 2.10

To summarize, we have found in this section that most of the Chinese live quite dispersed all over the city. However, there is a concentration of Chinese in Chinatown and a lesser degree in some parts of the in the peripheral suburbs. The question arising then is have the people who live in the perpheral suburbs sought ethnic propinquity? This question will be discussed further in Chapter 4.

Chapter 3 Data Collection and Questionnaire

Survey research is one of the most important methods of data collection in the behavioral studies. In this study, a survey of the Chinese immigrants in Edmonton was conducted in order to collect first hand information to examine what causes residential differentiation within an ethnic group and whether the people living dispersed are less ethnically oriented than the people living clustered. This chapter will briefly review how the data for the present study were collected and describe the questionnaire.

3.1 Study Area

The present study is centered on Edmonton. Edmonton not only includes the City of Edmonton but also includes St. Albert and Sherwood Park. These two surrounding areas were included because first they have very close relationships with Edmonton. The City of Edmonton, the City of St. Albert and the Hamlet of Sherwood Park together formed a fairly compact core of the Edmonton Metropolitan area (Alberta Municipal Affairs, 1977). The function of the two communities, the City of St. Albert and the Hamlet of Sherwood Park, was described as Edmonton's dormitory satellites (Gahr, 1979). The majority of people in these two areas commute to Edmonton (Grimble and Associates, 1976; Gahr, 1979). Second, the sample frame for the present study is the Edmonton Telephone Directory in which these two areas were included. Again this shows that these two areas have very close relationship with Edmonton.

3.2 Definition of the "Chinatown Group" and the "Suburban Group"

Chinatown is a term often heard in North American cities. However a precise definition of Chinatown is very difficult to obtain. Usually a Chinatown refers to a "quarter" of the city where Chinese businesses, institutions and Chinese residences concentrate (Lai, 1988:2).

In Edmonton there are two distinct Chinese sections as revealed in Chapter 2 (See Figure 2.1). One section is along 97th Street and between the 105A Avenue and 107 Avenue. The other is a triangular area bounded by 97th St, 102A Ave and Jasper Avenue. The immediate two neighborhoods-Boyle Street and McCauley within which the two distinct Chinese sections occur are heavily populated with Chinese people (City of Edmonton, 1978a). Therefore for the purpose of this study, we define the Chinatown group as the group who live in the neighborhoods of Boyle Street and McCauley and the suburban group as the group who live in neighborhoods other than Boyle Street and McCauley.

3.3 Sampling and Survey Design

A practical sample design seeks to produce valid and credible sample data and statistics that match the precision needed for the study. In this section, several steps involved in the sampling procedure for collecting the thesis data will be discussed. They include: definition of the survey population, construction of the sampling frame, determination of the sample size and administration of the survey.

3.3.1 Survey Population

The study population include those of Chinese ethnic origin but not Indo-Chinese (including Vietnamese, Laotian and Cambodian Chinese). The Indo-Chinese are excluded from the study because of the distinguishable differences in their backgrounds from the other Chinese immigrants. Nearly all of the Indo-Chinese came to Canada under the massive humanitarian refugee program beginning in the 1970's. It is assumed that their specific situation has made them quite different in the way of adaption to this society from the Chinese immigrants from other countries and under other immigration categories. The Indo-Chinese became a "group" within a group. According to the 1991 census, there are 32,960 Chinese who are of a single Chinese origin in Edmonton. Among them around 4,590 are Indo-Chinese[1]. Therefore, the Chinese population with which we are initially concerned is 28,370 (32,960-4,590) in 1991 in Edmonton.

The survey population is composed of those who are first generation immigrants and major wage earners of the households and who live in Edmonton, Alberta. Since the study focuses on "the major wage earner of the household", whether or not they live alone, the household is the basic unit for selection of the sample. The number of major wage earners will be the same as the number of Chinese households in Edmonton.

In order to obtain the number of Chinese households in Edmonton, the average size of the Chinese household had to be calculated first. Table 3.1 provides information on the

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[1] This is a rough estimation of the number of people who are of Chinese origin and who are from Vietnam, Laos and Cambodia. The *Immigration Statistics* (1975-1991) shows that a total of 27,644 immigrants from the above three countries have settled in Alberta during the last sixteen year period. We assume that 43.2% of them which is the number of 11,942 came to Edmonton (The percentage 43.2% is based on the statistics of the Alberta Career Development and Employment (ACDE,1990) that 43.2% of the immigrants to Alberta have settled in Edmonton during the 1980s). According to the 1991 census (Statistics Canada, 93-315,p36), there are a total of 7,350 people are of Vietnamese, Laotian or Cambodian origin in Edmonton. Therefore, the people of Chinese origin from the above three countries is 11,942-7,350=4,592. This is a slight underestimation because we did not include the Canadian-born people in the minuend.

Chinese household structure in Edmonton. Using the data from Table 3.1 the result of 4.35 is obtained as the average Chinese household size. Therefore, using 28,370 as the total number of Chinese, there are approximately 6,520 Chinese households in Edmonton. This number is also the number of Chinese major wage earners.

Table 3.1 Size of the Chinese Households in Edmonton, 1986

Household Size (Person)	Frequency	Percentage
1	19	4.5
2	39	9.2
3	75	17.6
4	107	25.1
5	69	16.2
6	71	16.7
7	28	6.6
8	18	4.2
Total	426	100.0

Source: Compiled from 1986 Census of Canada, *Public Use Sample Tape*, Individual File.

The present study attempts to compare two subgroups of the Chinese in the city-the Chinatown group and the suburban group. It is difficult to determine the exact number of Chinese people and households in the defined Chinatown area. Only a rough estimation can be made. According to the 1986 census, there were 1,205 people who were of Chinese origin in the defined Chinatown area (See Chapter 2, Section 2.5). This number is 4.2 per cent of the total Chinese in Edmonton in 1986. Assume the same proportion (4.2 per cent) of new Chinese immigrants (since 1987) settled in this area. By 1991, this area would have a total of 1,530 Chinese people. This number is used as the number of Chinese people in the defined Chinatown area.

The defined Chinatown area has a unique household structure. The area is comprised of a high proportion of males, single adult households and mobile individuals (City of Edmonton, 1987). The average household size in this area was 1.84 persons (calculated from the Neighborhood Fact Sheet, McCauley and Boyle Street published by the City of Edmonton, 1987). Research shows that the Chinese in Chinatown area also have a small household structure and most people living there are old people. Therefore, if we assume that the average size of the Chinese households is also 1.84 persons, then the total number of Chinese households is 830 in the defined Chinatown area. The number of Chinese households outside Chinatown area, therefore, is 5,690 (6,520-830).

3.3.2 Sampling Frame

A sampling frame is a list from which a sample can be taken. An ideal sampling frame would be a list with one to one correspondence between members on the list and the population of interest (survey population). Rarely will such frames exist. For the present study, the basic sampling frame was composed of the people with Chinese last names in the 1991 White Pages of the Edmonton Telephone Directory. The approximate size of this sampling frame was around 8,000. This sampling frame is neither a complete nor exclusive list of the survey population. The major omissions include: (1) the people whose names did not appear in the 1991 White Pages (2) those who used both last names and given names other than typical Chinese names. For example, some Chinese spell their last names as Lee which is identical to the English surname. In this case, only those who used Chinese given names were treated as Chinese and included in the sampling frame. The major ineligibles include: (1) the people whose status was either not a permanent resident or Canadian citizen but appeared on the telephone directories (2) major wage earners of Chinese households but born in Canada (3) The Indo-Chinese who still use both Chinese last and given names (4) Vietnamese, Laotian, Cambodian and Korean as well as those from any other ethnic origins whose last names and given names are similar or identical to Chinese names.

Since the present study attempts to study two subgroups, i.e. the Chinatown group and the suburban group, two separate sampling frames were constructed for each of them. From the basic sampling frame which contained 8,000 people with Chinese last names, 377 were found to have addresses falling in the defined Chinatown area. Even after considering the possible omissions from the actual selection, as well as the number of 1,420, which is an overestimation of the real number of Chinese households in the Chinatown area, the number of 377 was still well below the actual number of Chinese households located in Chinatown. The major reason may due to the people in this area being generally poor and old and many of them are without telephones.

3.3.3 Sample Size

A variety of factors influence the size of the sample appropriate for any study. Sample size determination involves trade-offs between accuracy and cost. Statistically the appropriate sample size is determined by the population variation, the specified precision (degree of accuracy), and the desired level of confidence (Guy *et al*, 1987). For the present study, 95% is set as the confidence level (z score = 1.96), 5% as the degree of accuracy and the population variance is at 50 per cent which is the maximum value of the population variance. From the table developed by Dixon and Leach (1976), a desired sample size of 384 was obtained (See Table 3.2). Since the ratio of the number of households located outside Chinatown to those inside Chinatown is 2.9:1, the sample size was 287 for the group outside Chinatown and 97 for the group living inside Chinatown.

Table 3.2 Sample Sizes Needed with Given Levels of Confidence, Assuming a Variability of 50% and a Very Large Population

Confidence Limit	Confidence level	
Percent(%)	99%	95%
1	16587	9604
2	4147	2401
3	1843	1067
4	1037	600
5	663	384
6	461	267
7	339	196
8	259	150
9	205	119
10	166	96
15	74	43
20	41	24

Source: Dixon and Leach, 1976.

3.3.4 The Survey

The survey was carried out between mid-May 1992 to the end of August 1992. Telephone calls were made to the suburban group to obtain qualified respondents. Those who agreed to participate in the survey were also asked the language they preferred the questionnaire should use (English or Chinese). Each day after the phone calls, the addresses of those who agreed to participate were prepared and the next day a questionnaire was sent to each of them. A self-addressed business reply envelope and a covering letter were sent out together with the questionnaire. The covering letter explained the purposes of the study and assured confidentiality (See *Appendix D*). It also requested the major wage earner in each of the households to fill out the questionnaire. The telephone calls were made between May 20 and June 10, 1992. A total of 300 potential respondents was obtained and a questionnaire was sent to each. By August 31, 1992, 177 questionnaires had been returned. The response rate was 59.0%. It must be mentioned here that our respondents were heavily biased to the group who settled in Edmonton before 1985. The reason is due to that Yuan of the Geography Department had conducted a survey among the Chinese immigrants who settled in Edmonton between 1985 to 1990 six months before the author. This caused a high ratio of refusals from the group on which she focused. Although the exact ratio was unknown, the results of the present study have this bias.

The sampling procedure was somewhat different with the Chinatown group. Initially the same kind of telephone calls were made as had been done to the suburban group. However, the results were frustrating. Despite a high number of unqualified people and refusals, language barriers were also a problem. Many people spoke dialects with which the author could not communicate. Therefore, another method was tried. Fifty questionnaires in Chinese were sent out without any telephone contact as a test. Only 7 of them were returned among which only 5 qualified for the study. Due to the cost, the method of direct mail without telephone contact was also abandoned. Then a snowball sampling procedure was used. The questionnaires were handed to some people who lived in Chinatown and were known to the author. They were asked to hand questionnaires to the people they know. Eventually, including the above five returned questionnaires, a total of 34 were obtained for the Chinatown group. This is not considered an adequate sample for our purposes. But in view of the effort made, the data can be considered satisfactory under the circumstances mentioned above.

3.4 Immigration Features of the Respondents

Since the research focuses on the Chinese immigrants who have settled in Edmonton, only those whose status is permanent residents or Canadian citizens were selected for the sample. Table 3.3 shows that at the time of the survey, 83.9 percent of the respondents are Canadian citizens and 16.1 percent are permanent residents. There is not much difference in immigration status between the two groups. The suburban group has a slightly higher proportion of Canadian citizens (85.9%) than the Chinatown group (85.3%).

Table 3.3 The Immigration Status of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Permanent Resident	4	12.1	25	14.1	29	16.1
Canadian Citizen	29	87.9	152	85.9	181	83.9
Total	33	100	177	100	211	100.0

source: survey

Table 3.4 shows that Hong Kong is the major source country of our respondents. The Chinese from Hong Kong comprise 67.8 per cent of the total sample. China is the second major source country with 13.3 per cent of the total sample. The Chinatown group has a higher proportion (26.5 per cent) from China than the suburban group. In addition, the Chinatown group has a higher proportion of people from Hong Kong and China (88.3 per cent) than the suburban group (79.6 per cent). The "other areas" in the responses include Malaysia, Singapore, Taiwan, Brunei, Britain, U.S.A, Japan and the countries of the Caribbean.

Table 3.4 The Last Country of Permanent Residence of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Hong Kong	21	61.8	122	68.9	143	67.8
P.R. China	9	26.5	19	10.7	28	13.3
Other Areas	4	11.7	36	20.4	40	18.9
Total	34	100	177	100	211	100.0

source: survey

3.5 Limitation of the Data

A good quality sample should provide an accurate estimate of the population parameters. However, during the sampling procedure, errors may occur in every step from the definition of the target population and the construction of sampling frames, to the actual sample selection. In the present study, the source of error in the sampling of the suburban group arises from sample selection bias (biased towards the people who settled in Edmonton before 1985) and the non-response rate. The extent of bias is not known because when the potential respondents refused to answer the questionnaire, they did not always specify they had done one before. The sample of the Chinatown group is non-representative because of the lack of a complete sampling frame, the use of a non-probability sample design and the small sample size. The data will be interpreted with caution.

3.6 The Questionnaire

The questionnaire was mainly designed to test if the Chinatown group and the suburban group differ significantly in their ethnic maintenance. The questionnaire also tried to find out why people live where they do through examining how the two groups perceive the relative importance of seven residential locational factors. The purpose is to see what factors (life-cycle stage, socioeconomic status or ethnicity) are the major factors influencing people's residential locational choices. In addition, the questionnaire sought information on the two groups' socio-demographic characteristics to better understand their different residential locational choices and degree of maintenance of ethnic identity. The content of the questionnaire was based on other studies which are related to the topic of ethnic maintenance, assimilation and residential locational choices (Hurh *et al*, 1978; McCracken, 1973; Nann,1970; Khatun, 1984; Driedger, 1975). The detailed format and content of the questionnaire is provided in *Appendix B* (English Version) and *Appendix C* (Chinese Version).

The questionnaire consists of three parts. The first part is questions about the respondents daily behavior and social life. It attempts to examine whether the two groups differ significantly in their degree of ethnic maintenance in such areas as language, meal preference, entertainment, friends and employment. These are grouped into six sub-sections. The content of each sub-section was provided in one sentence at the beginning of each of the sections. The six sub-sections include: (1) the language(s) used daily (2) food eaten and stores used (3) participation in the Chinese community and connections with the homeland (4) use of the Chinese media (5) friends and attitudes towards Canadians (6) employment. Strictly speaking, the last sub-section-questions about employment-should not belong to this part. They were included and put into the last subsection so that the respondents might answer freely.

The second part of the questionnaire asked about the respondents' residence. There were three questions in this part. It attempts to examine how the two groups perceive the relative importance of some residential locational factors. The first question is the number of times the respondents have changed their addresses. The second question is the location, type and tenure of the respondents' present and last two dwelling places in Edmonton. The third question was designed to find out the relative importance to the respondents of some residential locational factors. The factors include: dwelling space, financial ability, general access to other parts of the city, closeness to work, closeness to children's school, closeness to friends/relatives and pleasantness of the neighborhood. In addition to the above seven factors, an open category, "other", was provided so that the respondents might indicate other factors which they felt important. A five-point format (from "of great importance" to "of no importance") was used so that the respondents could express their opinions more precisely.

Questions about personal information formed the third part of the questionnaire. This part of the questionnaire attempted to obtain the socio-demographic details of the respondents in order to better understand the two groups' degree of ethnic maintenance and their different residential locational choices. The questions included age, age on arrival in Canada, country of origin, immigration status, sex, marital status, spouse's ethnic origin, number of children the respondents have, education status and household yearly income.

3.7 Summary

This chapter discussed several aspects of the data collection. It defined the study area and subject population, reviewed the sampling procedure including calculating the survey population, determined sample size and described the sampling frame. It also discussed the implementation of the actual survey; pointed to data limitations and finally reviewed the contents of the questionnaire. The next two chapters will focus on the data analysis. It is worth mentioning that a non-probability sampling procedure was used to sample the Chinatown group. Therefore the results of the data analysis will be interpreted with caution.

Chapter 4. Residential Locational Choices and Socio-Demographic Characteristics

The central theme of the thesis is to examine whether residential dispersal is associated with an diminution of ethnic identity. The Chinese who live clustered in Chinatown and the Chinese who live dispersed outside Chinatown were chosen so that the behavioral differences in their everyday lives could be compared. It is assumed that if residential dispersal is strongly associated with a weakening of ethnic identity, the two groups should differ significantly in their lifestyles. However, before investigating the lifestyles of the two groups, it is better to know first why people live where they do and what socio-demographic factors account for their different residential locational choices. The answers to these questions will provide a context and lead to a better understanding of why or why not, the two groups have different levels of ethnic identity. Therefore, as a prelude to the core of the study, this chapter will focus on describing the two groups' residential locational choices and their socio-demographic characteristics. The first part of this chapter will attempt to examine how the two groups perceive the relative importance of several residential locational factors. The second part of this chapter will discuss the two groups' socio-demographic characteristics which may affect their residential locational choices and their maintenance of ethnic identity. A Chi-square (χ^2) test will be used in this part to demonstrate if the two groups have statistically significant difference in their answers to the questions asked.

4.1 Reasons for Choosing the Present Dwelling

It has been mentioned in the Statement of the Problem that previous studies have their own shortcomings in using census data to examine the relationship between ethnic residential patterns and assimilation. The statistical association obtained from the census data cannot reflect people's thinking. In other words, we don't know why people live where they do and what their major concerns are when they choose their dwelling places. Their major concerns seem to be associated with the life-cycle. If it is the case, it is hard to prove that ethnic residential dispersal is necessarily associated with assimilation. In this respect, census data is not sufficient to solve the problem.

In this section, we will examine how the Chinese perceive the relative importance of different variables in the selection of their dwelling places. In order to achieve this objective, a closed format question was used. The question listed seven variables. These include space, financial factors, general access to the other parts of the city, closeness to work, closeness to children's school, closeness to a relative/friend and pleasant neighborhood. Each variable was assigned a score of 1 to 5 to indicate the degree of importance. It is to the respondents to choose one score for each variable. An average score of importance was calculated for each variable. The average score represents each variable's perceived importance by the respondents when they chose their present dwelling. The higher the score, the more important it was considered. The results are summarized in Table 4.1.

Table 4.1 Reasons for Choosing the Present Dwelling

		The Chinatown group			The suburban group		
		Number	Percentage	Average score of importance	Number	Percentage	Average score of importance
It has enough living space	1	9	42.9	4.25	94	53.4	4.25
	2	6	28.6		47	26.7	
	3	4	19.0		25	14.2	
	4	1	9.5		5	2.8	
	5	0	0.0		5	2.8	
The rent/mortgage can be afforded	1	10	50.0	3.80	81	46.0	3.86
	2	2	10.0		38	21.6	
	3	4	20.0		30	17.0	
	4	2	20.0		6	3.4	
	5	2	10.0		21	11.9	
It has easy access to other parts of the city	1	14	70.0	4.55	59	33.7	3.78
	2	2	10.0		49	28.0	
	3	2	10.0		46	26.3	
	4	1	5.0		11	6.3	
	5	1	5.0		10	5.7	
It is close to the workplace	1	5	25.0	2.70	39	22.3	3.23
	2	4	20.0		33	18.9	
	3	1	5.0		56	32.0	
	4	0	0		23	13.1	
	5	10	50.0		24	13.7	
It is close to the children's school	1	3	15.0	2.05	65	37.1	3.50
	2	1	5.0		35	20.0	
	3	2	10.0		30	17.1	
	4	1	5.0		12	6.3	
	5	14	70.0		33	18.9	

(Continued)

Table 4.1 Reasons for Choosing the Present Dwelling (Continued)

		The Chinatown group				The suburban group		
		Number	Percentage	Average score of importance		Number	Percentage	Average score of importance
It is near friends and/or relatives	1	8	40.0	3.35		16	9.1	2.45
	2	1	5.0			22	12.6	
	3	5	25.0			40	22.9	
	4	2	10.0			44	25.1	
	5	4	20.0			53	30.3	
It is in a pleasant neighborhood	1	5	25.0	2.80		82	46.9	4.03
	2	2	10.0			46	26.3	
	3	1	5.0			27	15.4	
	4	8	40.0			10	5.7	
	5	4	20.0			10	5.7	
	Total	20	100.0			175	100.0	

The order of the importance (from high to low) of each locational factor for the Chinatown group is : (1) general accessibility to other parts of the city (2) dwelling space (3) financial factors (4) closeness to friends and/or relatives (5) pleasant neighborhood (6) closeness to work and (7) closeness to children's school. The order for the suburban group is: (1) dwelling space (2) pleasant neighborhood (3) financial factors (4) general accessibility (5) closeness to children's school (6) closeness to work (7) closeness to friends and/or relatives.

"Dwelling space" and "financial factors" are in the top three selected by both groups. This result is consistent with McCracken's (1973) findings in his study of intra-urban migration in Edmonton. McCracken drew the conclusion that dwelling space and financial factors dominated Edmonton households' residential aspirations. Many researchers consider the households' changing space requirements as the principle inducement to residential mobility and as a consequence the most important variable in determining the final destination. As Rossi (1980) said:

> "...the major function of mobility (is) the process by which families adjust their housing to the housing needs that are generated by the shifts in family composition that accompany life cycle changes."

Financial ability is often considered the major restraint in determining the final choice of the dwelling place (McCracken, 1973). The results of the findings here support the above arguments. They suggest that no matter where people live, their major concerns are trying to adjust their housing needs to their financial ability.

Despite the fact that "dwelling space" and "financial factors" are in the top three listed by both groups, the differences between the two rankings are obvious. "General accessibility to the other parts of the city" is the most important locational factor for the Chinatown group while it is not in the top three listed by the suburban group. It has been mentioned in Chapter 1 that old people prefer to live near bus stops and grocery stores. It will be shown that the people living in Chinatown are in their retirement years.

Instead of "general accessibility", "pleasant neighborhood" appeared in the top three listed by the suburban group and ranked second. McCracken (1973) stated that suburban dwellers as a group are more concerned about neighborhood characteristics such as quietness, natural environment, neighborhood's reputation and neighbors' socioeconomic status than are inner city residents. The reason is that many households residing in the suburbs are in the child-bearing and child-rearing stages of the life-cycle. According to Rossi (1980), people in the child-bearing and child-rearing stages of the life-cycle are more

more concerned about whether the neighborhoods they choose to live in are suitable places for raising children. On the basis of their demographic profile it is to be anticipated the suburban group of Chinese has been similarly motivated.

Of the remaining factors not in the top three, "closeness to friends/relatives" is fourth for the Chinatown group, indicating that the respondents who live in Chinatown still wish to be near their friends/relatives. This factor was last in the order of importance for the suburban group. Propinquity to friends/relatives is of virtually no importance to this group. "Closeness to work" and "Closeness to the children's school" ranked at the bottom of the importance scale for the Chinatown group suggesting people there are not in the child-rearing stage and beyond employable age. These two factors were not very important for the suburban group also. They ranked sixth and fifth respectively. However, in contrast to the Chinatown group, "closeness to the children's school" was ranked before "closeness to work", re-emphasizing the importance of children to suburban Chinese families.

When the average score of importance is compared between the two groups, the Chinatown group has higher scores on "general accessibility", "closeness to friends/relatives" than the suburban group and lower scores on "closeness to workplace", "closeness to children's school" and "pleasant neighborhood". The two groups have the same score on "dwelling space" and nearly the same score on "financial factors" (the Chinatown group is only slightly smaller). The average score of importance provides a measure by which the group differences within the same scale can be compared. The above results have shown that "general accessibility" and "closeness to friends/relatives" are more important locational factors for the Chinatown group than the suburban group. "Closeness to workplace", "Closeness to children's school", "Pleasant neighborhood" are more important for the suburban group than the Chinatown group. "Dwelling space" and "Financial Factors" are equally important to both groups.

It was shown in Figure 2.3 that the outer rings of Edmonton were relatively more concentrated with Chinese than the inner suburbs. Does the outer-suburban group seek ethnic propinquity like the suburban Jews in many North American cities? Or, do they just happen to be concentrated there because that is where the housing is available and/or where they feel the environment is suitable for raising children? Detailed answers to the Chinese concentration in the outer-suburbs is beyond the scope of the present study. However, analysis of their opinions on the above residential locational factors may provide some guidelines for future study. The cases whose present addresses are in Millwoods and Castle Downs are isolated from the suburban group. There are in all 35 cases. Among them 34 cases are valid for this analysis (one case did not answer the question). The results are summarized in Table 4.2.

Table 4.2 Reasons for Choosing the Present Dwelling (the Millwoods and Castle Downs Group)

Reasons for Choosing Present Dwelling	Average Score (N=34)
It has enough living space	4.17
The rent/mortgage can be afforded	3.83
It has easy access to other parts of the city	3.43
It is close to the workplace	3.06
It is close to the children's school	3.40
It is near friends/relatives	2.89
It is in a pleasant neighborhood	3.69

In general, the outer suburban group scores relatively lower in each factor except "closeness to friends/relatives" than the total suburban group. The result seems to indicate that propinquity with friends/relatives is more important for the outer suburban group than the total suburban group. However, the order of importance shows that "closeness to friends/relatives" is also the least important factor among the residential locational choices for the outer suburban group. It is merely "relatively" more important for the outer suburban group than the total suburban group. The rankings between the outer suburban group and the total suburban group are not very different except that with the outer suburban group, financial factors are the second most important factor which is ahead of "pleasant neighborhood". Since the housing in the outer ring areas of a city are usually new, our finding might suggest that immigrants may choose to live in relatively new houses which are within their financial means.

In summary, when people choose their dwelling places, the most important thing for them is to adjust their housing needs to their financial abilities. This result indicates that both the life-cycle stage factor (indicated by enough dwelling space) and the social class factor (indicated by ability to pay rent or mortgage) play a very important part in the residential locational choices of the Chinese in Edmonton. In addition, the priority given to the locational factor "easy access to the other parts of the city" by the Chinatown group and the priority given to the "pleasant neighborhood" by the suburban group suggest that the two groups are in different stages of the life-cycle and that stages in the life-cycle is a very important factor in people's residential locational choice. This aspect will be elaborated on in the next section.

However, it was shown that the Chinatown group has a tendency to seek spatial propinquity while the suburban group does not. This suggests that the suburban group is spatially more assimilated than the Chinatown group. However, whether the spatial assimilation of the suburban group indicates assimilation in their life-styles is still not clear. The above findings suggest the life-cycle stage factor is one of the most important factors in determining Chinese' residential locational choices. Although the suburban group is residentially dispersed, the families will not necessarily have broken their ties with other Chinese. They can still maintain their current life-style. If this is the case, it would seem previous studies using ethnic residential patterns as a measurement of assimilation have their weakness.

4.2 Socio-demographic Characteristics of the Two Groups

The findings in the last section suggest that collectively the Chinatown group and the suburban group are in different stages of their life-cycles and are of different socio-economic status. The findings also indicate that the Chinatown group has a tendency to seek spatial propinquity while the suburban group does not. The questions raised from the above findings are what stages of the life-cycle and what socio-economic status the two groups are in and why the Chinatown group have sought ethnic propinquity. To determine this, in this section, the two groups' socio-demographic characteristics in terms of their life-cycle, socio-economic status and assimilation status, specifically on their abilities in English and Chinese, will be examined. The results will yield a better understanding of the two groups' different residential locational choices and provide a socio-demographic context for why, or why not, the two groups maintain different degrees of ethnic identity which will be discussed in the next chapter.

4.2.1 Age Distribution

The respondents' ages range from 20 to 92. Table 4.3 presents the age distribution for our sample by where each respondent lives. For the sample as a whole, the three age categories 35-39, 40-59, 50-59 contain 72.9 per cent of the respondents. The age category 40-49 is the modal category which contains 37.4 per cent of the total sample.

The two groups have significant differences in their age composition ($\chi^2=91.28$, d.f.=2). The majority of the Chinatown group are fairly old people. The average age of this group is 64.6 years. The population aged 60 and over contains 73.5 per cent of the population in the group. The age group "70 and over" alone contains half of the respondents in the group. Opposed to this, the suburban group is relatively young. The average age of this group is 43.8 years. People in the category 35-59 years account for 83.6 per cent of the group while people aged 60 and over comprise only 6.8 per cent. The most prominent difference between the two groups lies in the age category "70 and over". While this category contains 50 per cent of the people who live in Chinatown, only 0.6 per cent of the suburban group are over 70 years of age.

Table 4.3 Age Composition of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
Years	Number	Percentage	Number	percentage	Number	percentage
20-24	0	0	4	2.3	4	1.9
25-29	2	5.9	5	2.8	7	3.3
30-34	2	5.9	8	4.5	10	4.7
35-39	1	2.9	37	20.9	38	18.0
40-49	1	2.9	78	44.1	79	37.4
50-59	3	8.8	33	18.6	36	17.1
60-69	8	23.5	11	6.2	19	9.0
70 and over	17	50.0	1	0.6	18	8.5
Total	34	100	177	100	211	100

χ^2=91.28 (recategorized)[1] d.f.=2 Significant at .01 level.

The differences in the age composition between the two groups confirms each is in a different stage of the life-cycle. Most respondents who live outside Chinatown are in the child-bearing and child-rearing stage of life-cycle. Those living inside Chinatown have passed the child-rearing stage. Generally speaking, the people who are in the child-bearing and rearing stages of the life-cycle are more concerned about the neighborhood environment (McCracken, 1973). This is especially true for the Chinese. In the Chinese culture, there is a tradition that parents consider the children's education as the most important goal and their responsibility. Therefore, the Chinese living in the suburbs would give "pleasant neighborhood" such a high priority. As mentioned in Chapter 1, the elderly prefer living close to stores and bus stops accessible to other centers (Michelson, 1976). Therefore, it is not surprising that the Chinatown group, whose average age is 64.6 years, would place "the general access to the other parts of the City" as its highest priority.

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[1] One of the restrictions of using χ^2 test is that no cells should have an expected frequency of less than 5 (Sprinthall, 1987; Spence, 1990). Norušis (1991) argued that the *5-rule* is too stringent for large contingency tables. He suggested that χ^2 test can be used if no more than twenty percent of the cells with expected frequency less than 5 and no expected frequency less than 1. In the present study, we will follow Norušis' relaxed requirements for χ^2 test. For those variables which do not meet Norušis' relaxed requirements, the original categories will be combined if combination makes sense. For a complete guide of recategorization of the variables, please refer to *Appendix A*.

4.2.2 Marital Status and Spouse origin

An overwhelmingly large proportion of our respondents (79.1 per cent) is married. Single people form 15.2 per cent of the total sample. Very few people are divorced (0.9 per cent) which suggests that the Chinese people are very family-oriented. The differences between the two groups in marital status are not very obvious except in the widowed category. As Table 4.4 shows, a considerable proportion (18.2 per cent) of the Chinatown group is widowed while the proportion for the suburban group is only 1.1 per cent. Keeping in mind that fifty per cent of the Chinatown group are old people aged 70 years and over, the relatively large proportion of widowed people is not surprising. The widowed status, together with their old age, may be part of the reasons for their tendency to live in spatial propinquity. Michelson (1976) stated that old people prefer living together in order to avoid loneliness. In fact, among the 34 respondents of the Chinatown group, 18 were living in the Chinese Elders Mansion. The six widowed respondents lived in this age-segregated building. Four out of the 18 respondents who live in the Chinese Elders Mansion answered the question about their previous address. Two of these used to live in Chinatown and the other two previously lived outside Chinatown. Although the sample is small to prove anything, it does suggest that these Chinese elders may used to live with their children. When they became frail and required frequent attention, they moved into the Chinese Elders Mansion.

Among the ever married respondents (including divorced and widowed), 91.2 per cent of the suburban group claimed their married partners' ethnic origin was Chinese (see Table 4.5). All of the respondents living in Chinatown claimed their spouses' origin was of Chinese. Spouses' origin is important during the assimilation process. If the household head is a Chinese, and his/her spouse is also Chinese, the Chinese way of life will definitely be preserved. Since the majority of the respondents' spouses are also Chinese, it is expected both groups will maintain the Chinese life-style. A detailed examination of the extent of Chinese ethnic identity will be presented in the next chapter.

Table 4.4 Marriage Status of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Single	4	12.1	28	15.9	32	15.3
Married	23	69.7	144	81.9	167	80.0
Divorced	0	0	2	1.1	2	0.9
Widowed	6	18.2	2	1.1	8	3.8
Total	33	100	176	100	209	100

χ^2 test not applicable. (Recategorization does not make sense and 25% of cells with expected value less than 5).

Table 4.5 Origin of the Respondents' Spouses

	The Chinatown Group		The Suburban Group		Total Sample	
Chinese	Number	Percentage	Number	Percentage	Number	Percentage
Yes	29	100	135	91.2	164	92.7
No	0	0	13	8.8	13	7.3
Total	29	100	148	100	177	100

χ^2 test not applicable (25% of cells with expected value less than 5).

4.2.3 Age of the Respondents on Arrival in Canada

The age when the household head arrived in Canada has an important bearing on where people live and the degree of ethnic maintenance. Nann (1973) found that during the urban renewal program in Vancouver, the average age of the family head on arrival in Canada was less than 18 years for those leaving Chinatown and over 18 years for those who stayed in Chinatown. This suggests that the older one is upon arrival, the more one will rely on the ethnic community, since older people may be less proficient in English. People who are less proficient in English, in general, tend to use ethnic facilities more (Hoyt and Babchuk, 1981). Additionally, the age of the major wage earner on arrival in Canada will have a great impact on the person's assimilation process. The younger a person is on arrival, the less involvement in the home country and the easier will be the transition. This is especially true when a person has received a complete education in the receiving country.

χ^2 testing is not applicable for this variable. However, Table 4.6 shows there are striking differences between the two groups. The average age when the major wage earner came to Canada for the Chinatown group was 46.5 years. The average age for the suburban group was only 24.9. This result shows that the suburban group as a whole was much younger than the Chinatown group on arrival in Canada. The most noticeable difference between the two groups is the age category "50-59 years" and "60 and over". These two categories contain 61.8 per cent of the members of the Chinatown group and only 2.3 per cent of the members of the suburban group. In addition, the age categories 0-4, 5-9 and 10-14 contribute a small proportion (9.6 per cent) of the suburban group while none of the respondents living in Chinatown fell into these three age categories. These findings indicate that the Chinatown group are fairly old people upon arrival and none of them received their elementary education in Canada. This will definitely make their progress towards assimilation difficult.

Table 4.6 Age of the Respondents at Arrival in Canada

Years	The Chinatown group		The Suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
0-4	0	0	5	2.8	5	2.4
5-9	0	0	4	2.3	4	1.9
10-14	0	0	8	4.5	8	3.8
15-19	4	11.8	36	20.3	40	18.0
20-24	2	5.9	46	26.0	48	22.7
25-29	3	8.8	30	16.9	33	15.6
30-39	3	8.8	33	18.6	36	17.1
40-49	1	2.9	11	6.2	12	5.7
50-59	10	29.4	3	1.7	13	6.2
60 and over	11	32.4	1	0.6	12	5.7
Total	34	100	177	100	211	100

χ^2 test not applicable (25% of cells with expected value less than 5 after recategorization)

As opposed to the Chinatown group, the suburban group are younger on arrival and as a consequence a number of them may have received part of their education in Canada. Forty-six per cent of the suburban group were between the ages of 15 and 24 years when they arrived in Canada. These people may have received their high school and post secondary education in Canada. The people who arrived in Canada under 14 years is only a very small proportion (9.6 per cent) of the suburban group. This indicates the majority of the suburban group has received an elementary education in their original culture before arriving in Canada. This will have a negative effect on their assimilation process.

4.2.4 Length of Residence in Canada

It has been generally accepted that the longer the immigrant has resided in the host society, the higher will be that person's degree of assimilation (Hurh *et al*, 1978). However, the relationship between the length of residence and the degree of assimilation may be not a linear one. After studying the attitudinal changes among foreign students in the United States, Becker (1968) argued that there is a limit to the degree of assimilation in spite of upward mobility in socioeconomic status. As a logical extension, there is no direct linear correlation between the length of residence in the host society and the degree of assimilation. Hurh *et al* (1978) pointed out that although the process of assimilation may be progressive, especially in the initial period of adjustment, it might not continue beyond a certain point.

The impact of length of residence on the assimilation process is complicated. For some people it has an immense impact. For some others it has none. It is case to case dependent and better to be considered together with age at arrival. For example, if an immigrant arrives during his/her working age and has been exposed to the host society, gradually that person will be "somewhat assimilated" into the host society. For instance, the person has to pay bills and talk with the teachers about his children's school performance. In this case, length of residence in the host society may increase the degree of assimilation. However, if an immigrant aged in their 50s or 60s is reunited with their family and economically reliant on their children, it is possible the person may choose to spend their entire immigrant lives in the ethnic cluster without learning a word of English. This is possible especially when an ethnic group has developed a high degree of institutional completeness. In this situation the length of residence in the host society may have no effect at all on the degree of assimilation.

The impact of length of residence on residential locational choice is also complicated. For some people, the ethnic cluster may serve as a "transfer station". With time passing and an increasing degree of assimilation, these people may move from the ethnic cluster to the suburbs. However, some people may choose to never live in the ethnic cluster, while some old people upon arrival may never want to leave it. In these two cases, length of residence will have no impact at all on residential locational choices.

The average years resident in Canada for the total sample is 18.9 years. It is 18.0 years for the Chinatown group and 19.0 years for the suburban group. Although the discrepancy between the two groups in the average years of residence is not large, the difference is statistically significant ($\chi^2=12.86$, d.f.=2). When the length of residence is divided into different periods, the suburban group is concentrated in the periods 10-14 years, 15-19 years and 20-30 years. The Chinatown group is mostly concentrated in the periods 10-14 years and 20-30 years (see Table 4.7). The lowest number is in the category 15-19 years. Table 4.7 also shows that the Chinatown group contains a large proportion (32.3 per cent) of newcomers who have stayed in Canada less than ten years. This result suggests that Chinatown does serve as an immigrant reception center. The percentage of the suburban group residing in Canada less than ten years may be more than the number shown in the Table, since the data is biased towards those immigrants who came before 1985.

Table 4.7 Length of Residence in Canada of the Respondents

Years	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
1-4	5	14.7	8	4.5	13	6.2
5-9	6	17.6	9	5.1	15	7.1
10-14	9	26.5	31	17.5	40	19.0
15-19	2	5.9	49	27.7	51	24.2
20-29	9	26.5	62	35.0	71	33.6
30 and over	3	8.8	18	10.2	21	9.9
Total	34	100	177	100	211	100

χ^2=12.86 (recategorized) d.f.=2 Significant at .01 level

4.2.5 General Education Level

The general level of education may have a great impact on an immigrant's degree of assimilation. It is accepted that people who have attained a higher education level assimilate more readily than those who have attained lower education level (Jiobu, 1988). Table 4.8 provides the information on the education levels of the respondents.

Table 4.8 Education Status of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Completed University or College	7	20.6	86	48.6	93	44.3
Some University or College	1	2.9	22	12.4	23	11.0
Completed High School	7	20.6	33	18.6	40	19.0
Some High School	9	26.5	25	14.1	34	16.2
Elementary School	10	29.4	10	5.6	20	9.5
Total	34	100	177	100	210	100

χ^2=20.07 (recategorized) d.f.=2 Significant at .01 level

The respondents of the two groups differ significantly ($\chi^2 = 20.07$, d.f.=2) in their education levels. In general, the suburban group are much better educated than the Chinatown group. Forty-eight percent of the suburban group claimed they have a university degree or college diploma, while the proportion is only 20.6 percent for the Chinatown group. In addition, there is a big difference between the two groups in the proportion who received only an elementary education. The proportion of the Chinatown group is 29.4 per cent while for the suburban group it is only 5.6 per cent. However, there is not much difference between the two groups in the proportions which have received a high school diploma.

4.2.6 Proficiency in the Chinese and English Languages

Although the general level of education of an immigrant is an important variable when considering assimilation, language ability is more specific in assessing an immigrant's degree of assimilation. As mentioned in Chapter 1, many immigrants live clustered in North American cities because they cannot speak English and thus feel comfortable living with their fellow countrymen. The immigrants' ability in English will also affect their job opportunities. In order to assess the language abilities among the Chinese immigrants, they were asked to report their Chinese and English schooling and subjectively evaluate their proficiency in the two languages.

Table 4.9 and Table 4.10 provide information on the length of Chinese and English schooling respectively of the respondents. The two groups do not have a statistically significant difference in Chinese schooling ($\chi^2=5.14$, d.f.=2). On the average the Chinatown group spent 8.4 years in Chinese schooling and the suburban group spent 8.5 years in it. However, the suburban group have a much larger proportion (54.0 per cent) who received more than 11 years of Chinese schooling and a smaller proportion (10.2 per cent) who received less than 5 years of Chinese schooling. This is consistent with the fact that the suburban group have a higher education level than the Chinatown group.

The two groups have a significant difference ($\chi^2=11.77$, d.f.=2) in their English schooling. The average English schooling for the Chinatown group is only 1.38 years. It is 4.66 years for the suburban group. Compared with years of Chinese schooling, the difference in years of English schooling between the two groups is larger. Table 4.8 shows that while 61.8 per cent of the Chinatown group reported no English language schooling at all, this proportion is only 15.34 percent for the suburban group. Additionally, the proportion of respondents who received six years and more of English schooling is 38.6 per cent for the suburban group while it is only 8.8 per cent for the Chinatown group.

Table 4.9 and Table 4.10 also show that both groups spent fewer years in English schools than in Chinese. This result is consistent with the age when the major wage earner of the household came to Canada. It reflects the fact that many major wage earners came to Canada after they were beyond high school age.

Table 4.9 Chinese Schooling of the Respondents

Years	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
None	2	5.9	5	2.8	7	3.3
1-5	7	20.6	13	7.4	20	9.5
6-10	13	38.2	63	35.8	76	36.2
11 and over	12	35.3	95	54.0	107	51.0
Total	34	100	176	100	210	100

χ^2=5.14 (recategorized) d.f.=2 Insignificant at .01 level

Table 4.10 English Schooling of the Respondents

Years	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
None	21	61.8	27	15.4	48	22.9
1-5	10	29.4	81	46.0	91	43.3
6-10	1	2.9	46	26.1	47	22.4
11 and over	2	5.9	22	12.5	24	11.4
Total	34	100	176	100	210	100

χ^2=11.77 (recategorized) d.f.=2 Significant at .01 level

In order to further assess each respondent's ability in Chinese and English, each was asked to self evaluate their proficiency in speaking, reading and writing both Chinese and English. The results are summarized in Table 4.11 and Table 4.12. Table 4.11 shows that the suburban group has a more dispersed response pattern than the Chinatown group. The suburban group have larger proportions in the category "fluently" in all three items - speaking Chinese (79.1 per cent), reading Chinese (71.2 per cent) and writing Chinese (55.9 per cent). At the same time they also have larger proportions in the category "not at all" for the three items (3.4 per cent for speaking Chinese, 9.0 per cent for reading Chinese and 9.0 per cent for writing Chinese). These results appear consistent with the findings that a larger proportion of the suburban group received Chinese schooling for six years and more and with the larger proportion arriving in Canada before they were ten years of age. Table 4.11 shows that in general, both groups are proficient in Chinese. The majority in both groups speak, read and write Chinese either "fluently" or "pretty well".

Compared with the proficiency in Chinese, both groups have a "weaker" ability in English. Again this is consistent with the fact that both groups have received less English schooling than Chinese (see Table 4.10). The sample as a whole has smaller proportions in the category "fluently" in all three items - speaking English (33.6 per cent), reading English (33.2 per cent) and writing English (26.6 per cent).

Table 4.12 also shows the two groups have even a larger difference in their proficiency in English than in Chinese. The majority of the suburban group can speak, read and write English either "fluently" or "pretty well" (75.7 per cent for speaking, 75.8 per cent for reading and 68.3 per cent for writing). However, the majority of the Chinatown group falls into the category "enough to be understood" or "not at all" (76.4 per cent for speaking, 76.4 per cent for reading and 79.4 per cent for writing). This means the majority of people living in Chinatown face serious problems in the use of English. In fact, more than half of the respondents there claim that they cannot speak, read and write English at all.

Table 4.11 Self-Evaluation of Proficiency in Chinese of the Respondents

		The Chinatown Group		The Suburban Group		Total Sample	
		Number	Per centage	Number	Per centage	Number	percen-tage
Speaking Chinese	Fluently	21	61.8	140	79.1	161	76.3
	Pretty Well	11	32.4	23	13.0	34	16.1
	Enough to be understood	1	2.9	8	4.5	9	4.3
	not at all	1	2.9	6	3.4	7	3.3
	χ^2 test not applicable (25% of cells with expected value less than 5)						
Reading Chinese	Fluently	12	35.3	126	71.2	138	65.4
	Pretty well	12	35.3	27	15.3	39	18.4
	Enough to get by	9	26.5	8	4.5	17	8.1
	Not at all	1	2.9	16	9.0	17	8.1
	χ^2=4.19 (recategorized)		d.f.=1	Significant at .01 level			
Writing Chinese	Fluently	9	26.5	99	55.9	108	51.2
	Pretty well	9	26.5	44	24.9	53	25.1
	Enough to be understood	14	41.2	18	10.2	32	15.2
	Not at all	2	5.9	16	9.0	18	8.5
	χ^2=10.74 (recategorized)		d.f.=1	Significant at .01 level			
	Total	34	100	177	100	211	100

Table 4.12 Self-Evaluation of Proficiency in English of the Respondents

		The Chinatown Group		The Suburban Group		Total Sample	
		Number	Per centage	Number	Per centage	Number	Percen -tage
Speaking English	Fluently	3	8.8	68	38.4	71	33.6
	Pretty well	5	14.7	66	37.3	71	33.6
	Enough to be understood	8	23.5	37	20.9	45	21.4
	Not at all	18	52.9	6	3.4	24	11.4
	χ^2=32.95 (recategorized)		d.f.=1	Significant at .01 level			
Reading English	Fluently	3	8.8	67	37.9	70	33.2
	Pretty well	5	14.7	67	37.9	72	34.1
	Enough to get by	6	17.6	32	18.1	38	18.0
	Not at all	20	58.8	11	6.2	31	14.7
	χ^2=32.95 (recategorized)		d.f.=1	Significant at .01 level			
Writing English	Fluently	3	8.8	53	29.9	56	26.6
	Pretty well	4	11.8	68	38.4	72	34.1
	Enough to be understood	6	17.6	43	24.3	49	23.2
	Not at all	21	61.8	13	7.4	34	16.1
	χ^2=25.78 (recategorized)		d.f.=1	Significant at .01 level			
	Total	34	100	177	100	211	100

To summarize the language abilities of the two groups, it is clear that both are proficient in Chinese and more proficient in Chinese than in English. The suburban group, in general, do not have problems in the use of English while the Chinatown group face serious problems in using it. This together with their old age, makes the Chinatown group's tendency to seek ethnic propinquity not too difficult to understand. Because they are old and unable to speak English, they live together in Chinatown to take advantage of the highly clustered Chinese institutions and businesses and to avoid a life of loneliness and inconvenience. On the other hand, the suburban group's relatively greater ability in English demonstrates their potential for further assimilation, although this potential does not necessarily mean giving up their Chinese life-styles.

4.2.7 Employment Status and Income

There is a big difference in the employment status between the Chinatown group and the suburban group. As Table 4.13 shows, 67.6 percent of the Chinatown group are retired people. In contrast, 91.0 percent of the suburban group are employed. Only 6.2 percent are retired. These results indicate that the people who live in Chinatown are largely beyond the employable years.

When the annual incomes of the two groups are examined, the differences are also very obvious. As Table 4.14 shows, the majority (55.9 per cent) living in Chinatown has an annual family income below $10,000 and 26 per cent between the category $10,000-$24,999. Only 2.9 per cent receive $50,000 and more. On the other hand, over one third (39.0 per cent) of the suburban group has an annual family income of $50,000 and over, and a very small proportion (2.8 per cent) receive less than $10,000. These results suggest the Chinatown group is poorer in comparison to the suburban group. In fact, several respondents who live inside Chinatown mentioned in their questionnaires that they receive money from their children.

Table 4.13 Employment Status of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Employed	11	32.4	161	91.0	172	81.5
Unemployed	0	0	5	2.8	5	2.4
Retired	23	67.6	11	6.2	34	16.1
Total	34	100	177	100	211	100

χ^2 not applicable (Recategorization does not make sense and 25% of cells with expected value less than 5).

Table 4.14 Family Income of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Under 10,000$	19	55.9	5	2.8	24	11.3
10,000$-24,999$	9	26.5	30	16.9	39	18.5
25,000$-49,999$	5	14.7	73	41.2	78	37.0
50,000$ and over	1	2.9	69	39.0	70	33.2
Total	34	100	177	100	211	100

χ^2=54.00 (recategorized) d.f.=2 Significant at .01 level

4.3 Summary

This chapter began by discussing how the two groups perceive the relative importance of seven residential locational factors. The results showed that the life-cycle stage factor and socioeconomic status played very important roles in people's residential locational choices. Both groups try to adjust their housing needs within their financial abilities. The results also indicated that the Chinatown group has a tendency to seek ethnic propinquity while the suburban group does not. In addition, the findings suggested that the two groups are in the different stages of the life-cycle. Because the life-cycle stage factor played such an important role in people's residential locational choices, previous studies using spatial dispersal of an ethnic group as a measure of assimilation is not adequate. The life-cycles of an ethnic group should also be examined.

Further examination of the two groups' socio-demographic characteristics in terms of the life-cycle, socioeconomic status and assimilation status (specifically abilities in English and Chinese) demonstrated that the Chinatown group are old, retired and have passed the child-rearing stage of the life-cycle. The suburban group are younger and in the child-bearing and child-rearing stage of the life-cycle. In addition, the suburban group were younger on arrival in Canada and with a substantial knowledge in English. In contrast, the Chinatown group were, in general, quite old on arrival in Canada and with hardly any knowledge of English. Considering all these factors together as well as their old age, the tendency to seek ethnic propinquity by the Chinatown group is not surprising. Other socio-demographic findings include: the majority of the respondents' spouses are Chinese; the average years resident in Canada for both groups is slightly less than twenty years; the suburban group are better educated and better off economically than the Chinatown group. The question to be addressed next is on the basis of their demographic profiles, to what extent has each group maintained its ethnic identity? Will the suburban group be less ethnically oriented and thus more assimilated than the Chinatown group? This is the major objective of the study and will be discussed in the next chapter.

Chapter 5 Maintenance of Ethnic Identity

The findings summarized in Chapter 4 suggested that where people of an ethnic group live may be caused by factors not related to assimilation. Stages in the life-cycle were proposed as an alternative. In other words, it is difficult to decide an ethnic group's degree of assimilation and ethnicity maintenance from only its spatial distribution. The group's behavior in relation to assimilation and ethnic maintenance after they are dispersed residentially has to be examined in order to know to what extent residential dispersal is associated with a diminution ethnic identity. This chapter will focus on this issue. By comparing the differences in life-style and social circle of the two groups, an attempt is made to determine if the suburban group are less ethnically oriented than the Chinatown group.

5.1 Ethnicity Maintenance in Cultural Aspects

5.1.1 Language Used At Home

A preference for speaking one's mother tongue has always been one of the major measures of assimilation (Hurh *et al*, 1978). One way to measure ethnic language maintenance is the language used between members of the household (Driedger, 1975; O'Bryan *et al*, 1976). As Table 5.1 shows most of the respondents communicate with their spouses mainly in Chinese[1]. Among the married respondents over 65 percent of them reported that Chinese was the "major" or the "only" language they use to communicate with their spouses. There is no statistically significant difference ($\chi^2=9.80$, d.f.=2) between the Chinatown group and the Suburban group. However, some notable differences can still be found in the language used when speaking to their spouses. Since the Chinatown group has a considerable proportion who cannot speak English, it is not surprising that 76.6% of this group speak only Chinese to their spouses. This compares with only 34.9% for the suburban group. On the other hand, none of the respondents in the Chinatown group use English as the "major" or the "only" language to communicate with their spouses. These two categories contain 16.6 percent of the suburban group. In addition, the suburban group has a higher proportion using both English and Chinese to communicate with their spouses.

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[1] The married people in this question and the next question "what language(s) do you use to your children" include both the "married" and"widowed" respondents in Table 4.4. This accounts for the variation in the married totals in Table 5.1 and 5.2.

Table 5.1 Language Used to the Spouse at Home

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
English Only	0	0	14	8.8	14	7.4
English Mainly	0	0	4	2.5	4	2.1
English and Chinese (each about equal)	3	10.0	44	27.7	47	24.9
Chinese Mainly	4	13.3	61	38.4	65	34.4
Chinese Only	23	76.7	36	22.6	59	31.2
Total	30	100	159	100	189	100

$\chi^2=9.80$ (recategorized) d.f.=2 Insignificant at .01 level

The situation is different in the language used to communicate with the children. There is statistically significant difference ($\chi^2=25.21$, d.f.=2) between the two groups. For the Chinatown group, "Chinese only" is the absolute major category which contains 69 percent of the respondents. There are no respondents who reported that they speak

"English only" or "English mainly" to their children. For the suburban group, "English and Chinese" is the major category. It contains 44.1 percent of the respondents. "Chinese only" is the third major category. It contains only 14.5 percent. In addition, "English only" and "English mainly" is spoken by 19.7 per cent of suburban households. This is not a large proportion but nevertheless quite significant.

The significant difference in the language used to the children between the two groups is not surprising. The majority of the Chinatown group (See Table 4.12) do not speak English at all. Therefore, when talking at home to either the spouses or the children, the Chinese language will be the only communication tool. In contrast, most people in the suburban group (75.7%) can speak English fluently or pretty well. At the same time, considering 65% of the suburban group is between the age of 35-49 years, their children must be receiving an education in Canada. These children may feel more comfortable speaking English. Thus, English is more frequently used when speaking to the children than when speaking to one's spouse. It is expected that the speaking English with the children will have a positive impact on the parents' assimilation process.

Table 5.2 Language Used to the Children at Home

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
English Only	0	0	12	7.9	12	6.6
English Mainly	0	0	18	11.8	18	9.9
English and Chinese (each about equal)	4	13.8	67	44.1	71	39.2
Chinese Mainly	5	17.2	33	21.7	38	21.1
Chinese Only	20	69.0	22	14.5	42	23.2
Total	29	100	152	100	181	100

χ^2=25.21 (recategorized) d.f.=2 Significant at .01 level

5.1.2 Dietary Preferences

The respondents were asked to report the frequency of eating western food. As Table 5.3 shows, the majority (48.8%) eat western food only "occasionally". There are 26.5 per cent who eat western food frequently. The percentage (8.1%) drops drastically in the categories of "every meal" and "once a day". In the current research, respondents were not asked how frequently they eat western food for breakfast, lunch and dinner separately. However Hurh *et al*'s (1978) research on Korean immigrants in the Chicago area, showed that western food is eaten most frequently for breakfast and lunch but not for dinner. This implies that western food has become a necessity rather than a preference, since western food is easier to prepare. His conclusion is that the traditional Korean food is predominantly preferred over western food, while western food is utilized for convenience. From the author's personal experience, the Chinese also eat western food as a convenience.

Although neither of the two groups eat western food very often, there is still a statistically significant difference ($\chi^2 = 20.91$, d.f. = 2) between them. The suburban group has a higher proportion (21.1%) that eats western food "frequently" and a lower proportion (29.3%) of "rarely" than does the Chinatown group. The proportion eating western food occasionally is quite similar for the two groups. On the whole, the results show the suburban group are more assimilated than the Chinatown group with respect to their dietary habits. However, this is only relative to the Chinatown group. In fact, the majority of the suburban group report they eat western food only "occasionally". In this sense they are not considered to be highly assimilated.

Table 5.3 Respondents' Frequency of Eating Western Food

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Every Meal	1	2.9	4	2.3	5	2.4
Once a Day	0	0	12	6.8	12	5.7
Frequently	3	8.8	53	29.9	56	26.5
Occasionally	16	47.1	87	49.2	103	48.8
Rarely	14	41.2	21	11.9	35	16.6
Total	34	100	177	100	211	100

χ^2=20.91 (recategorized) d.f.=2 Significant at .01 level

5.1.3 Festivals Celebrated

There are a lot of Chinese traditional holidays and festivals. These include the Chinese New Year, the Mid-Autumn Festival, the Dragon Boat Festival and the Lantern Festival. Each festival has its own special food. For example, in the Chinese New Year people usually make very big feasts containing various dishes which may symbolize happiness and money. Although many of these festivals have lost their traditional meanings, for example, the Dragon Boat Festival was originally in memory of a great poet who lived two thousand years ago, they have become a part of the symbols of Chinese culture. It is argued that celebrating these holidays functions as a form of ethnic maintenance.

In the present study, people were asked if they celebrate any Chinese holidays in any form, such as going out for dinner or Karaoke, inviting friends home, having big feasts and/or taking part in the activities organized by various Chinese organizations. As Table 5.4 shows, 80.1 percent of the total respondents reported they celebrate Chinese holidays and festivals. This result shows that the Chinese people in Edmonton still maintain quite a strong ethnic identity. The two groups are not statistically significantly different ($\chi^2=5.90$, d.f.=2) although proportionately more Chinese people in Chinatown (97.1%) celebrate Chinese holidays than do those in the suburban group (76.8%).

Table 5.4 Chinese Festivals Celebrated

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	33	97.1	136	77.3	169	80.5
No	1	2.9	40	22.7	41	19.5
Total	34	100	176	100	210	100

$\chi^2=5.90$ d.f.=2 Insignificant at .01 level

5.1.4 Chinese Games Played

Different cultures and countries have different kinds of recreational styles. For example, Chinese people enjoy Mahjong. It is a kind of card game. People usually gamble when they play Mahjong. When people of an ethnic group participate in their own games their ethnic life style is being maintained. In the present study people were asked if they play any popular Chinese games, such as Mahjong.

Table 5.5 shows that for the whole sample, 7.6 percent of the respondents claimed that they play Chinese games "frequently", 27.5 percent claimed "never", and 30.3 percent and 34.5 percent claimed that they play Chinese games "occasionally" and "rarely" respectively. These results suggest that Chinese games are not an important part of the life-styles of both the Chinatown group and the suburban group. The two groups do not differ significantly difference ($\chi^2=4.69$, d.f.=1) in the frequency with which Chinese games are played. But when comparing the frequency distribution of the two groups, proportionately more people in the Chinatown group play Chinese games "frequently" (8.8%) and "occasionally" (47.1%), while proportionately more people in the suburban group play Chinese games "rarely" or "never".

Table 5.5 Respondents' Frequency of Playing Chinese Games

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	3	8.8	13	7.3	16	7.6
Occasionally	16	47.1	48	27.1	64	30.3
Rarely	9	26.5	64	36.2	73	34.6
Never	6	17.6	52	29.4	58	27.5
Total	34	100	177	100	211	100

$\chi^2=4.69$ (recategorized) d.f.=1 Insignificant at .01 level

5.1.5 Frequency of Reading Chinese Newspapers

One area by which to measure the immigrants' maintenance of ethnic identity is their use of the ethnic media. In order to avoid bias, for example, some people prefer reading rather than watching television, the questions about exposure to the Chinese media included several kinds of public media, including newspapers, books/magazines, radio, television and videos. This section will discuss readership of Chinese newspapers.

As mentioned in Chapter 2, there are three free Chinese community newspapers in Edmonton. In addition, people can subscribe the National Canadian-Chinese newspaper and other Chinese newspapers from Hong Kong, Taiwan and mainland China. They also can get access to the above newspapers in public libraries and Chinese bookstores. Table 5.5 shows that for the whole sample, about half of the respondents read Chinese newspapers "frequently", 34.6 per cent read Chinese newspapers "occasionally", only 10.4 per cent and 9.0 per cent reported they "rarely" or "never" respectively read Chinese newspapers . The results show that Chinese newspapers play an important part in the lives of the Chinese in Edmonton.

Table 5.6 Respondents' Frequency of Reading Chinese Newspapers

	The Chinatown group		The Suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	24	70.6	73	41.2	97	46.0
Occasionally	8	23.5	65	36.7	73	34.6
Rarely	1	2.9	21	11.9	22	10.4
Never	1	2.9	18	10.2	19	9.0
Total	34	100	177	100	211	100

χ^2=3.78 (recategorized) d.f.=1 Insignificant at .01 level

The two groups are not statistically different ($\chi^2=3.78$, d.f.$=1$) in their frequencies of reading Chinese newspapers. However, when comparing the frequency distributions some notable differences between the two groups emerged. The Chinatown group read Chinese newspapers more frequently than the suburban group. More than ninety per cent (94.1%) of the Chinatown group reads Chinese newspapers "frequently" and "occasionally" whereas in the suburban group, although these two categories still consist of the majority (77.9%) of the respondents, quite a proportion (22.1%) "rarely" or "never" reads a Chinese newspaper. This difference is probably due to the fact that many people who live in Chinatown are unable to read English and they have to rely on the Chinese newspaper to get up to date information.

5.1.6 Frequency of Reading Chinese Books / Magazines

Table 5.7 shows that for the whole sample, the most frequently reported response in reading Chinese books/magazines is the category "occasionally". The category "frequently" (23.7%) and "rarely" (23.7%) ranked second equally. Compared with the frequency reading Chinese newspapers, the frequency reading Chinese books/magazines is generally lower. This may indicate that books/magazines are not as informative and important as newspapers in the lives of the Chinese in Edmonton. It may also indicate that the Chinese books/magazines are not as easily obtained as Chinese newspapers. There is no significant difference ($\chi^2=1.65$, d.f.$=1$) between the two groups. However, the Chinatown group has a larger proportion (76.5%) in the combined categories "frequently" and "occasionally" than the suburban group (65.4%). The suburban group has a higher proportion in the "frequently" (25.4%) category. This may be due to the fact that the suburban group has attained a higher educational level and enjoys reading more than the people who live in Chinatown.

Table 5.7 Respondents' Frequency of Reading Chinese Books / Magazines

	The Chinatown group		The suburban group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	5	14.7	45	25.4	50	23.7
Occasionally	21	61.8	67	37.9	88	41.7
Rarely	5	14.7	45	25.4	50	23.7
Never	3	8.8	20	11.3	23	10.9
Total	34	100	177	100	211	100

χ^2=1.65 (recategorized) d.f.=1 Insignificant at .01 level

5.1.7 Frequency of Listening to Chinese Radio

The role of Chinese radio is neither as important as Chinese newspapers in the Chinese community life nor as important as Chinese books/magazines. Table 5.8 shows that most of the respondents "rarely" listen to the Chinese radio broadcasts (34.1%), and only 18 percent listen "frequently". There is a statistically significant difference ($\chi^2=1.65$ (recategorized), d.f.=1) in the frequency of listening to Chinese radio between the two groups. The Chinatown group has quite a large proportion (73.6%) who listen to the Chinese radio "frequently" and "occasionally", while these two categories comprise less than half (36.8%) of the suburban group. The above different response rates again illustrates that due to their lack of English ability, the people who live in Chinatown rely more on the Chinese media for information than those who live outside Chinatown. On the other hand, the difference also illustrate that people who live in Chinatown have deeper Chinese roots and are more interested in Chinese music and stories. In this sense, the Chinatown group has retained its cultural identity more so than the suburban group.

Table 5.8 Respondents' Frequency of Listening to Chinese Radio

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	11	32.4	27	15.4	38	18.2
Occasionally	14	41.2	38	21.7	52	24.9
Rarely	5	14.7	67	38.3	72	34.4
Never	4	11.8	43	24.6	47	22.5
Total	34	100	175	100	209	100

χ^2=13.92 (recategorized), d.f.=1 Significant at .01 level

5.1.8 Frequency of Watching Chinese TV

There is a national Chinese TV station in Canada broadcasting in Chinese everyday. Most programs are in Cantonese. The programs include news and entertainment programs. Table 5.9 shows the response pattern for the whole sample is distributed across all categories unlike the frequencies of reading Chinese newspapers and frequency of reading Chinese books/magazines. A majority (28.6 per cent) rarely watch Chinese TV. However, a slightly lower proportion (21.4 per cent) reported that they watch Chinese TV everyday. Combined with the category "frequently", the proportion of respondents in these two categories reaches 37.6 per cent, which is much larger than the proportion (23.7 per cent) which reads Chinese books/magazines or which listens frequently to the Chinese radio (18.2 per cent). This result shows that Chinese TV is more important in the lives of the Chinese than Chinese books/magazines and Chinese radio but is less important than Chinese newspapers.

The two groups are not significant different ($\chi^2=1.40$, d.f. = 1) in the frequency of watching Chinese TV. However, some differences can be noted between the two groups. The respondents in the Chinatown group have a much higher proportion (64.7 per cent) which watches Chinese TV "everyday" and "frequently" than does the suburban group (32.4 per cent). To the contrary, the suburban group has a higher proportion (42.1 per cent) in the combined category "rarely" and "never". These results reaffirm that people who live in Chinatown rely more on the Chinese media and consequently are less likely to relinquish their cultural heritage.

Table 5.9 Respondents' Frequency of Watching Chinese TV

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Everyday	12	35.3	33	18.8	45	21.4
Frequently	10	29.4	24	13.6	34	16.2
Occasionally	2	5.9	45	25.6	47	22.4
Rarely	5	14.7	55	31.3	60	28.6
Never	5	14.7	19	10.8	24	11.4
Total	34	100	176	100	210	100

$\chi^2=1.40$ (recategorized) d.f.=1 Insignificant at .01 level

5.1.9 Frequency of Borrowing/Renting/Purchasing Chinese Videos

The frequency with which Chinese videos are borrowed/rented/purchased is presented in Table 5.10. "Rarely" (34.1 per cent) ranked as the major category for the whole sample. "Occasionally" (30.2 per cent) ranked second. The two groups are not significantly different ($\chi^2=4.13$, d.f. = 1). However, this is the first time the Chinatown group has a lower proportion in the combined categories "frequently" and "occasionally" than the suburban group. No respondents, in the Chinatown group, fall into the "frequently" category. This result is most likely due to the fact that most videos available in the market are new movies and performances which are popular among young people. The old people whose tastes are generally in favor of traditional Chinese operas, are not interested in these videos even though they can afford VCRs. Rather than more "assimilated" than the suburban group, the people living in Chinatown simply lack an interest in Chinese videos. Instead they use other kinds of Chinese media more often than do the suburban group.

Table 5.10 Respondents' Frequency of Borrowing/Renting/Purchasing Chinese Videos

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	0	0	22	12.6	22	10.5
Occasionally	8	23.5	55	31.4	63	30.2
Rarely	11	32.4	61	34.9	72	34.4
Never	15	44.1	37	21.1	52	24.9
Total	34	100	175	100	209	100

χ^2=4.13 (recategorized) d.f.=1 Insignificant at .01 level

5.2 Connection with Homeland

One way to measure the immigrants' degree of assimilation is to examine their connection with their homeland. If the immigrants have close association through contacts with their homeland, it means that psychologically they still belong to the place where they came from and thus they have not been totally assimilated (Jiobu, 1988).

To examine their connection with the homeland, the respondents were asked if they still have relatives in their homeland, how often they contact them and how often they visit their homeland. The answers are provided in Table 5.11, 5.12 and 5.13.

Table 5.11 The Number of People Who Still Have Relatives in the Homeland

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Yes	34	100	148	85.1	182	87.5
No	0	0	26	14.9	26	12.5
Total	34	100	174	100	208	100

χ^2 test not applicable (25 per cent of cells with expected frequency less than 5 after recategorization).

Table 5.11 shows that 87.5 per cent of the total respondents still have relatives in their homeland. χ^2 test is not applicable for this variable. However, it is clear all of the Chinatown group have relatives in their homeland, whereas fewer, 85.1 per cent, of the suburban group do. Table 5.12 illustrates that the majority of the respondents (44.9 per cent) contacted their relatives "occasionally". The next major category is "frequently" (25.1 per cent). The frequency distributions for the two groups are quite similar and there is no statistically significant difference ($\chi^2 = 0.02$, d.f. = 1) between them.

Table 5.12 Respondents' Frequency of Contacts With Relatives

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	8	23.5	37	25.0	45	24.7
Occasionally	15	44.1	67	45.3	82	45.1
Rarely	6	17.6	33	22.3	39	21.4
Never	5	14.7	11	7.4	16	8.8
Total	34	100	148	100	182	100

χ^2=0.02 (recategorized)   d.f.=1   Insignificant at .01 level

The majority of the respondents (48.8 per cent) reported they "rarely" visit their homeland (See Table 5.13). The next major category is "occasionally" (24.6 per cent), followed by "never" (22.3 per cent). Only a very small proportion (4.2 per cent) claim they visit their homeland "frequently". Again there is no statistically significant difference between the two groups ($\chi^2 = 0.00$, d.f. = 1). Those differences in their responses are greatest in the categories "rarely" and "never". The suburban group has a higher proportion (59.8 per cent) than the Chinatown group (38.2 per cent) in the category "rarely". However, the Chinatown group has a higher proportion (32.4 per cent) in the category "never" than the suburban group (20.3 per cent). Perhaps this is a reflection of the inability of the people living in Chinatown to afford the trip. Also it may be because most of the family members of the Chinatown group already live in Canada.

Table 5.13 Respondents' Frequency of Visiting Homeland

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	1	2.9	8	4.5	9	4.3
Occasionally	9	26.5	43	24.3	52	24.6
Rarely	13	38.2	90	50.9	103	48.8
Never	11	32.4	36	20.3	47	22.3
Total	34	100	177	100	211	100

χ^2=0.00 (recategorized) d.f.=1 Insignificant at .01 level

5.3 Maintenance of Ethnic Identity on the Secondary Level

Structural assimilation of the immigrants can be divided into two parts: assimilation on the secondary level and assimilation on the primary level (Gordon, 1964). Assimilation on the secondary level generally indicates assimilation in work related areas so that the ethnic group has the same occupational distribution and occupational independence as the host,i.e. not dependent on ethnic employers. Assimilation on the primary level indicates assimilation in informal social contacts. In this section, ethnic maintenance on the secondary level will be discussed. The occupational distribution of the Chinese along with that of Edmontonians was discussed in Chapter 2 using census data. The data shows that relative to the city population, the Chinese are over-represented in specialized areas such as technological and related fields and under-represented in managerial areas. The focus of this section is on the occupational independence of the Chinese. In other words, for whom do Chinese work, with whom do they work and if they work for themselves are their customers or clients mainly Chinese? The assumption here is that if a person of an ethnic group does not feel comfortable working for and with people of other ethnic groups, as a result of discrimination or language barriers, the person will try to confine his/her work in his/her own group (Gills and Whitehead, 1972). As a consequence, ethnic identity will be strengthened.

The first question asked about the occupational independence of the respondents was whether they are self-employed or not. The answers to this question are provided in Table 5.14.

Table 5.14 Self-Employment Rate of the Respondents

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Self-employed	1	9.1	28	17.4	29	16.9
Not self-employed	10	90.9	133	82.6	143	83.1
Total	11	100.0	161	100.0	172	100.0

χ^2 test not applicable (25 per cent of cells with expected frequency less than 5 after recategorization).

For the whole sample, among those who are currently employed, 16.9 per cent of them are self-employed. This percentage is higher than the self-employment rate of 10 per cent for the Canadian labour force in 1991 (Statistics Canada, 1993). The result shows that the Chinese in Edmonton demonstrate to a certain degree occupational independence. The Chinatown group has a smaller proportion (9.1 per cent) of self-employed people than the suburban group. However, this does not suggest that the Chinatown group is more assimilated than the suburban group. First the sample size is too small. Second, this question alone cannot provide a single conclusion. Considering their relatively low educational level and income, the lower self-employment rate of the Chinatown group is because of their inability to set up their own businesses. A conclusion can only be made in relation to other variables.

Among the 29 self-employed respondents, four of them owned restaurants, three operated real estate companies and three owned grocery stores. Other specified types of business or service include a medical clinic, building design, publishing, import/export, advertisement, herb store, automechanics, carpenter, clothing, drafting, cab driver and daycare.

The ethnic origin of the customers/clients of these self-employed respondents are presented in Table 5.15. Nearly 65 percent of the respondents' customers or clients are mainly non-Chinese. Slightly over ten percent of the respondents' customers or clients are mainly Chinese. The significance of these results will be discussed next when the ethnic origins of the customers/clients of the companies in which the respondents work are compared.

Table 5.15 Ethnic Origin of the Customers/Clients of the Self-employed Respondents

	Number	Percentage
Mainly Chinese	3	10.7
Chinese and Non-Chinese (each about equal)	7	25.0
Mainly Non-Chinese	18	64.3
Total	28	100.0

The ethnic origin of the employers, co-workers and customers/clients of the 143 respondents who are not self-employed are provided in Table 5.16, Table 5.17 and Table

5.18 respectively. Because of the small sample size, the χ^2 test was not used for these variables.

Table 5.16 Ethnic Origin of the Employers

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Chinese	3	30.0	10	7.7	13	9.1
Non-Chinese	7	70.0	123	92.3	130	90.9
Total	10	100.0	133	100.0	143	100.0

Table 5.17 Ethnic Origin of Coworkers

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Chinese	1	30.0	6	4.5	7	4.9
Non-Chinese	2	20.0	52	39.1	54	37.8
both	7	70.0	75	56.4	82	57.3
Total	10	100.0	133	100.0	143	100.0

Table 5.18 Ethnic Origin of the Customers

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Mainly Chinese	1	10.0	3	2.5	4	3.1
Chinese and Non-Chinese (about equal number)	1	10.0	10	8.2	11	8.4
Mainly Non-Chinese	8	80.0	108	89.3	116	88.5
Totalu	10	100.0	121	100.0	131	100.0

Table 5.16 shows that among the 143 respondents who are not self-employed, 9.1 per cent have Chinese employers while 90.9 per cent have non-Chinese employers. Thirty percent of the Chinatown group have Chinese employers in contrast to only 7.7 per cent for the suburban group. This result shows that the Chinatown employees are dependent on other Chinese for their employment.

Of the 143 respondents, seven people (4.9 per cent) reported that all of their coworkers are Chinese (Table 5.17). In fact, six out of the seven respondents also have Chinese employers. Thirty-eight per cent of the 143 respondents reported that the other employees of the company are non-Chinese and 57.3 per cent reported that the other employees include both Chinese and non-Chinese. Comparing the two groups, the Chinatown group has a higher percentage (10.0 per cent) in the "All Chinese" category than the suburban group (4.5 per cent), while the suburban group has a higher percentage of "non-Chinese" (39.1 per cent) than the Chinatown group (20.0 per cent). These results also indicate that the Chinatown group is more restricted to a Chinese work circle while the suburban group has been able to take advantage of wider opportunities.

Among the 131 respondents who answered the question about ethnic origin of the customers/clients, 8.4 per cent reported that Chinese and non-Chinese were about equal in number and 88.5 per cent reported the customers were mainly non-Chinese. The Chinatown group has a higher percentage in the categories "mainly Chinese" (10.0 per cent) and "Chinese and non-Chinese, about equally" (10.0 per cent) than the suburban group. The suburban group has a higher proportion in the category "mainly non-Chinese" (89.3 per cent) than the Chinatown group. These results are consistent with the facts that the Chinatown group has a higher proportion of Chinese employers and co-workers. They also imply that the Chinatown group has a higher proportion working in Chinese-oriented types of businesses.

Using Table 5.15 and 5.18 the customers/clients' ethnic origin of the self-employed respondents and the companies in which the non-self-employed respondents work can be compared. Self-employed respondents have a higher proportion of customers/clients in the "mainly Chinese" (10.7 per cent) and "Chinese and non-Chinese" (25.0 per cent) categories. This is probably due to self-employed people attracting Chinese customers/clients because they are Chinese, even though their services are not necessarily Chinese oriented.

In summary, the total sample of Chinese in Edmonton are assimilated on the secondary level despite the fact that the Chinese have a higher self-employment rate than Canadians. Most employed people have found jobs with people of other groups. However, the Chinatown group are more confined to Chinese circle in work than the suburban group. This result indicate that the suburban group is more assimilated on the secondary level interaction than the Chinatown group.

5.4 Maintenance of Ethnic Identity in Primary Interactions

5.4.1 Organizational Participation

One widely recognized measure of social assimilation is organizational membership. If one group of immigrants has a higher proportion of its members attending organizations and associations of the host society than another, then it is argued that group has a higher degree of social assimilation. Conversely, if a group has a higher proportion attending associations within the same ethnic circle than another, the former demonstrates a stronger ethnic identity.

To ascertain the degree to which respondents have retained their ethnic identity, they were asked if they belong to any voluntary Chinese organizations such as a clan (a kind of association of people with the same surnames), locality (a kind of association of people from same region), religious, political or entertainment associations. The results are provided in Table 5.19. Forty per cent of the total respondents belong to Chinese organizations. This result is slightly higher than the 35 per cent that are members in Chinese organizations in Toronto (Lai, 1972). However, it is lower than Korean immigrants in Chicago. Hurl *et al* 's (1978) research showed that 63.8 per cent of their respondents belong to Korean organizations.

There is a statistically significant difference ($\chi^2=33.91$, d.f.=1) between the two groups' membership in Chinese organizations. The majority (87.9 per cent) of the Chinatown group belong to a Chinese organization. Only 31.6 per cent of the suburban group are members of a Chinese organization.

The high proportion of organizational membership of the Chinatown group may be due to three reasons. First the majority of the Chinatown group are old. Over 70 per cent of them are above 60 years. Hoyt and Babchuk's (1981) research showed the aged have a higher level of participation in ethnic voluntary associations because retired people have the opportunity to spend their leisure time in various associations. Second, the Chinatown group's ability in English is poor. Over 50 per cent of them do not speak English at all. Therefore, they feel more comfortable with, and some of them can only socialize with, other Chinese. Third, the Chinatown group are fairly old on arrival in Canada. They have deep "roots" in their original culture. Besides, many of them may never really get involved in the Canadian society. Therefore, they are more interested in maintaining their previous way of life and prefer to communicate with people of their own group. The suburban group's lower proportion of organizational membership is an indicator of their assimilation. Wickberg (1982) stated that the post-1967 Chinese immigrants rarely joined the old type of Chinese organizations because such organizations did not fit their needs and interests. In addition, they may be busy with their jobs and their children so that they have little energy left for such activities. In either case, it shows that the suburban group may be more involved in Canadian society and its affairs rather than the Chinese way of life.

Table 5.19 Respondents' Membership of Chinese Organizations

	The Chinatown Group		The Suburban Group		Total Sample	
Membership	Number	Percentage	Number	Percentage	Number	Percentage
Yes	29	87.9	56	31.8	85	41.7
No	1	12.1	120	68.2	124	58.3
Total	30	100	176	100	209	100

χ^2=33.91 d.f.=1 Significant at .01 level

Mere membership in an organization does not provide sufficient information on the degree of involvement in organizational activities. The respondents who belong to Chinese associations were further asked about their frequency of participation in the associations' activities. It is expected that the suburban group may not be as active in Chinese associations as those of the Chinatown group, since the former are busy doing other things such as spending most of the time with their children. However, Table 5.20 shows that the two groups have a similar distribution pattern in the frequency of participation. There is no statistically significant difference ($\chi^2 = 0.06$, d.f. = 1) between the two groups. Both groups have a majority who participate in their associations' activities "frequently". The categories "frequently" and "occasionally" together contain more than seventy percent of the respondents in each group. In fact, the suburban group has an even higher proportion in the categories "frequently" and "occasionally" than the Chinatown group. This is contrary to our assumption and illustrates that those association members who live outside Chinatown have the same degree of ethnic identity as their counterparts. It also illustrates that residential dispersal does not prevent people from attending the activities of the Chinese associations, most of which are located in Chinatown.

Table 5.20 Respondents' Frequency of Participation in the Chinese Organizations

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
Frequently	13	45.0	27	48.2	40	47.1
Occasionally	9	31.2	19	33.9	28	32.9
Rarely	6	20.2	8	14.3	14	16.5
Never	1	3.6	2	3.6	3	3.5
Total	29	100	56	100	85	100

χ^2=0.06 (recategorized)   d.f.=1   Insignificant at .01 level

5.4.2 Presence of Close Friends

Closely related to organizational participation as a measure of social assimilation is the occurrence of close friends outside the ethnic group. An immigrant may be integrated with the host society on a secondary level, such as in the work force, while at the same time solely interacting with friends of his/her own ethnic group---the primary level.

In the present study, the respondents were asked if their closest friends are all Chinese, mainly Chinese, each about equal, mainly non-Chinese or all non-Chinese. Table 5.21 shows that there is no statistically significant difference ($\chi^2 = 9.64$, d.f.=2) between the two groups in their response to the question. However, if the frequency distributions are compared, the differences between the two groups are obvious. The frequency distribution of the Chinatown group is concentrated in the Chinese part of the scale. Nearly 70 percent of the respondents identify all of their friends as Chinese. Another 23.5 percent identify their friends as "mainly Chinese". Only 8.8 percent report they have Chinese friends and non-Chinese friends in about equal numbers. Furthermore, no respondents in this group identify their friends as "mainly non-Chinese" or "all non-Chinese". Compared with the Chinatown group, the responses of the suburban group are more evenly distributed. The categories "all non-Chinese" and "mainly non-Chinese" contain 4.5 per cent and 6.8 per cent respectively of the respondents in the suburban group. The category "each about equal" contains 27.3 per cent of the respondents compared to only 8.8 per cent for the Chinatown group. On the other hand, the category of "all Chinese" contains only 20.9 per cent of the suburban group compared to 67.6 per cent for the Chinatown group. However, on the whole, the frequency distribution of the suburban group is still weighted towards the Chinese part of the scale. The categories "mainly Chinese " and "all Chinese" together contain 65 per cent of the respondents.

Table 5.21 Respondents' Presence of Close Friends

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
All Non-Chinese	0	0	8	4.5	8	3.8
Mainly Non-Chinese	0	0	12	6.8	12	5.7
Each about equal	3	8.8	42	23.7	45	21.3
Mainly Chinese	8	23.5	78	44.1	86	40.8
All Chinese	23	67.6	37	20.9	60	28.4
Total	34	100	177	100	211	100

χ^2=9.64 (recategorized) d.f.=2 Insignificant at .01 level

The above differences between the two groups are not difficult to understand. The Chinatown group are mainly old, retired people who came to Canada in their old-age. They lack a knowledge of English. They do not work and consequently their social circle is mainly confined to the ethnic community. On the other hand, the majority of the suburban group use English "fluently" or "pretty well" (see Table 4.10). They work outside the ethnic community so that they have more opportunities to interact with people from other groups. Thus, they have more opportunities to make friends with people in other groups. In summary, the data above have shown that the suburban group is more assimilated in terms of informal social networks than the Chinatown group. However, the extent of the involvements is limited since the majority of the suburban group's closest friends are still Chinese.

5.4.3 Attitude Toward Canadians

As mentioned in Chapter 1, the social environment has an important impact on the immigrants' degree of assimilation. If the host society is hostile towards the immigrants, then the immigrants are more likely to confine themselves to the ethnic community in order to avoid conflict and consequently ethnic identity is strengthened. Conversely, if the host society is friendly towards immigrants, the assimilation process is likely to accelerate. In this respect the respondents were asked how they feel about the statement "Canadians are generally friendly".

The respondents' attitudes are divided into five categories, ranked from "strongly agree" (1) to "strongly disagree" (5). The results are presented in Table 5.22. The mean score for the total sample is 2.1, showing that these immigrants feel Canadians are generally friendly. The means are 2.02 for the Chinatown group and 2.11 for the suburban group. This indicates the Chinatown group feels Canadians are more friendly than the suburban group does. At first sight, this result seems unreasonable. Since the Chinatown group has less interaction with members of other groups, they should have more prejudice towards Canadians. One plausible explanation seems to be that the people who live in Chinatown may not have experienced the same psychological deprivation as the suburban group. It is generally accepted that during the initial adjustment period after migration, immigrants' occupations may not be as prestigious as what they have been used to. Thus they may feel frustrated and this generates "hatred" towards the host society (Hurh *et al*, 1978). Most of the people who live in Chinatown do not work. They still live in the Chinese community and thus they do not feel threatened by discrimination. On the surface Canadians may be more polite towards the aged in everyday matters than people were in their home country. Therefore, the Chinatown group tends to feel the Canadians more friendly than does the suburban group.

Table 5.22 Respondents' Attitude Towards Canadians

	The Chinatown Group		The Suburban Group		Total Sample	
	Number	Percentage	Number	Percentage	Number	Percentage
1	9	26.5	44	24.9	53	24.9
2	16	47.1	76	42.9	92	42.9
3	8	23.5	52	29.4	60	29.4
4	1	2.9	3	1.7	4	1.7
5	0	0	2	1.1	2	1.1
Total	34	100	177	100	211	100

5.5 Discussion and Summary

The major objective of this chapter was to determine whether the suburban group maintained a lesser degree of ethnic identity than the Chinatown group. Four areas of ethnic maintenance were examined. They were: ethnic maintenance in cultural aspects, connection with the homeland, ethnic maintenance on the secondary level and ethnic maintenance in primary interactions. The results were too complicated to make a simple conclusion. Except for "ethnic maintenance on the secondary level" and the two variables "relatives in the homeland" and "contacts with them", χ^2 test were applied. There are no statistically significant differences in most of the variables. This result seems to suggest that the two groups have the same degree of ethnic identity, at least as far as these variables are concerned.

On the other hand, the two groups do have statistically significant differences in "language used to children", "frequency of eating western food", "membership of Chinese organizations" and "frequency of listening to Chinese radios". Further examination of the frequency distributions of the two groups on the above four variables showed that the suburban group are more assimilated than the Chinatown group. In addition, those variables in which there are no statistically significant differences between the two groups and in the variables where χ^2 tests were not applied, it was found that the responses of the Chinatown group are always more weighted toward the Chinese part of the scales than the suburban groups. The exception is their "attitudes towards Canadians". These results again suggest, although tentatively, that the suburban group has been prepared to adopt a variety of features of the Canadian culture.

The findings in this chapter also suggest that a strong ethnic identity persists among the Chinese immigrants no matter whether they live in an ethnic cluster or not. Both groups maintained Chinese life-styles although the degree of maintenance is stronger for the Chinatown group than the suburban group.

To summarize all the above findings of this chapter, both the Chinatown group and the suburban group maintained a high degree of ethnic identity. The suburban group were slightly less ethnically oriented and thus more assimilated than the Chinatown group. How does this conclusion say about the hypothesis that ethnic residential dispersal is associated with a diminution of ethnic identity? The result that both groups maintain a high degree of ethnic identity suggests, at least, that ethnic residential dispersal does not prevent people from maintaining their ethnic life-styles. This conclusion support Agócs' (1980) hypothesis that a viable ethnic community without neighborhood. People who live dispersed all over the city can still use ethnic languages, celebrate ethnic holidays, use ethnic media and interact with friends of their own group. In this respect, Driedger and Church's (1974) argument that residential segregation is a necessary condition of institutional completeness and as a result a necessary condition to maintain a high degree of ethnic identity is not correct.

Second, the result that the suburban group is slightly less ethnically oriented than the Chinatown group suggests that there is some relationship between ethnic residential dispersal and assimilation although this relationship may not be as simple and direct as previous studies suggested. The results of Chapter 4 indicated that residential dispersal may be mainly caused by life-cycle stage factor which has nothing to do with assimilation. It is also because of their stages in the life-cycle that the suburban group are more "exposed" to the Canadian society. For example, they have to talk with the teachers about their children's school performance; they have to read Canadian newspapers in order to learn about the economic situation. All these will make the suburban group adopt the Canadian way of lives and in this process they become more assimilated without necessarily lose their own culture. In other words, residential dispersal will have some impact on the immigrants' assimilation. However, this impact is not a short-term and an obvious one, and it does not necessarily cause a diminution of ethnic identity.

In conclusion, both groups maintained a strong ethnic identity. The suburban group was slightly less ethnically oriented than the Chinatown group. These results indicate first, that ethnic residential dispersal does not prevent people from maintaining their ethnic identity and second, that the suburban group is more involved in Canadian society and thus has a greater potential to assimilate. Although only in four out of the 15 variables χ^2 tests showed the suburban group was significantly different from the Chinatown group, the people living in the suburbs seem more prepared to move towards assimilation. How far, or to what extent, they will progress is not known from the analysis. However, one thing is certain, people living in the suburbs are more ready to adapt to the Canadian way of life. Their demographic profiles suggest they people have been "forced" to expose themselves to Canadian society. Opposed to this, the Chinatown group will stay much as they are now, as people living in Chinatown are old, without much involvement with the host society and with little knowledge of English.

Chapter 6. Conclusions

The major objective of the study was to examine the relationship between ethnic residential segregation/dispersal and the maintenance of ethnic identity. Specifically, the goal was to test whether ethnic residential dispersal is associated with a diminished ethnic identity. In order to achieve this purpose, a case study was conducted of the Chinese in Edmonton. The Chinese were divided into two groups - the Chinatown group which live clustered in the Chinatown area, and the suburban group which live in other parts of the city. If the assumption that ethnic residential dispersal is associated with a diminished ethnic identity is correct, the suburban group was expected to be less ethnically oriented than the Chinatown group. For a better understanding of this issue, how the two groups perceive the relative importance of some residential locational factors was examined first. This provided some insight into the reasons for residential differentiation within the ethnic group. Secondly, the socio-demographic profiles of the two groups were examined. These gave the extent to which they might maintain their ethnic identity and important insights into why they chose their present residential locations. The goal of the third section of the study was to establish the degree of ethnic identity maintained by each group. This was accomplished by examining ethnic maintenance in language, eating, entertainment, work related areas and the social network. The research findings are summarized below.

6.1 Summary of Findings

1. In general, both the life-cycle stage factor (indicated directly by dwelling space and indirectly by general accessibility to other parts of the city, pleasant neighborhood,

closeness to workplace and closeness to children's school) and socioeconomic status (indicated indirectly by ability to rent or pay off a mortgage) played very important roles in people's residential locational choices. The most important thing for both groups when they chose their present dwelling was to try to adjust their housing needs within their limited financial resources. The fact that first priority of the Chinatown group was the locational factor "general accessibility to the other parts of the city" and that the suburban group's second priority was "pleasant neighborhood" indicated that the two groups were in the different stages of the life-cycle. Because stage in the life-cycle played such important role in people's residential locational choices, spatial dispersal of an ethnic group as a measure of assimilation, is not sufficient. On the other hand, the Chinatown group had a tendency to seek ethnic propinquity while the suburban group did not. This result indicates that ethnic factor, closeness to friends and/or relatives, is an important reason for residential segregation.

2. Further examination of the two groups' socio-demographic characteristics in terms of life-cycle, socioeconomic status and assimilation status (specifically their abilities in English and Chinese) demonstrated that the Chinatown group are old, retired and have passed the child-rearing stage of the life-cycle. The suburban group are younger and in the child-bearing and child-rearing stages of the life-cycle. In addition, the suburban group was younger on arrival in Canada and had a substantial knowledge of English. In general, the Chinatown group was quite old on arrival in Canada and with hardly any knowledge of English. Their old age and difficulty with English are the major reasons why the Chinatown group sought ethnic propinquity.

Other socio-demographic findings showed the majority of respondents' spouses were Chinese. This will have a negative impact on the assimilation process. The average years resident in Canada for both groups was slightly under twenty years and the impact of length of residence on assimilation depends on whether the respondents are involved in the Canadian society or not. The suburban group was better educated and better off economically than the Chinatown group which suggests that the suburban group has a greater potential to be assimilated than the Chinatown group.

The socio-demographic profiles obtained for the Chinese in Edmonton, especially Chinese living in Chinatown, are similar to what Nann (1970) obtained for the Chinese in Vancouver in several ways. However, there are some differences between the two. Nann's study was conducted more than twenty years ago when post-1967 immigration had not been long in effect. Our data for the Chinatown group are biased towards the people who live in the Elders' Mansion. One of the prominent differences between the people living in Chinatown in Vancouver and those in the Edmonton's Chinatown is that in the former there are a lot more respondents under the age of 18 when they arrived in Canada despite the fact that both groups consist of high percentages of old people. This fact indicates that the old people in the Vancouver Chinatown are mainly remnants of the pre-1923 generation of the Chinese immigrants. The old people in the Edmonton Chinatown today arrived under the family classification after the Second World War. Another prominent difference is that the educational level of the people in Edmonton's Chinatown is a lot higher than those in the Vancouver Chinatown. This result shows that the educational level of the Chinese immigrants is increasing over time.

3. The Chinatown group and the suburban group did not have significant differences in most of the areas examined to establish the extent to which they had maintained their ethnic identity. These areas included: "language used to spouse", "whether celebrating Chinese holidays", "frequency of playing Chinese games", "frequency of reading Chinese newspaper", "frequency of reading Chinese books/magazines", "frequency of watching Chinese TV", "frequency of visiting homeland", "frequency of participating the activities of Chinese organizations" and "ethnic origin of close friends". On the other hand, the two groups do have statistically significant differences in "language used to children", "frequency of eating western food", "frequency of listening to Chinese radio" and "membership of Chinese organizations". Further examination of the frequency distributions of the two groups on these above four variables showed that the suburban group have adapted more Canadian ways than the Chinatown group. In addition, for those variables in which there were no statistically significant differences between the two groups and where χ^2 testing was not applied, it was found that the responses of the Chinatown group were always weighted more towards the Chinese part of the scale than the suburban group.

4. A strong ethnic identity persists among the Chinese immigrants in Edmonton no matter whether or not they live in an ethnic cluster. Ethnic identity is expressed as the tendency to cling to the Chinese ways of lives in language used at home, eating, entertainment and the social network. Both groups maintained the Chinese life-style although the Chinatown group has maintained its ethnic identity more than the suburban group. The high degree of institutional completeness of the Chinese in

Edmonton (especially their dispersed restaurants which serve a residentially dispersed people) and their racial and cultural distinctiveness, all promote the persistence of a strong Chinese ethnic identity.

5. The result that both the Chinatown group and the suburban group retained a high degree of ethnic identity indicated that ethnic residential dispersal does not prevent people from maintaining their ethnic life-styles. The result that the suburban group was slightly less ethnically oriented, and thus more assimilated, than the Chinatown group indicated that residentially dispersed people appear to be on the path towards assimilation. They are more "exposed" and involved in the Canadian society through force of circumstances. For instance, they have to pay bills and talk with teachers about their children's school performance. To what extent this assimilation will reach need longitudinal study and beyond the scope of the thesis. However it is certain that the suburban group has strong demographic potential to move on towards assimilation while the Chinatown group will stay much as they are now.

To summarize the whole thesis, the general goal of the present study was to examine the relationship between ethnic residential segregation and assimilation. The conception adopted in this thesis is not a causal relationship. Little attempt was made to determine whether assimilation is a cause or effect of ethnic residential segregation. Rather, the thesis focused on whether, and to what extent, ethnic residential segregation is associated with assimilation. The research findings summarized above showed that there is some relationship between the two in the sense that the suburban group is slightly less ethnically oriented than the Chinatown group. However, at the present stage we cannot determine whether residential location is the cause of the suburban group's higher degree of assimilation. Perhaps residential location's effect on assimilation is superficial. As we also summarized above, the suburban group is very different from the Chinatown group in terms of their socio-demographic profiles. The suburban group, which consisted mainly of young and educated people from Hong Kong, has already been more westernized than the Chinatown group before they set foot in Canada and therefore its potential to assimilate was greater. The different socio-demographic characteristics of the two groups might be a more accurate way of explaining the different degree of assimilation than the impact of residential location. In addition our findings suggest that the socio-demographic characteristics of the two groups are responsible for the different residential locational choices. Because of the importance of the socio-demographic variables in this area of study, more detailed studies should be conducted on how the age, age upon arrival in the host society, education and knowledge of English affect people's residential locational choices and assimilation.

6.2 Limitations of the Study

The study was designed to compare ethnic maintenance of the two Chinese groups in Edmonton - the Chinatown group and the suburban group. Due to language barrier and financial restrictions, a snowball sampling method, a non-probability procedure, was used to sample the Chinatown group. Thus, data quality is reduced compared with probability sampling. The results have to be examined with a degree of caution and are suggestive only.

There are also some weaknesses in the questionnaire. A part of the study was to examine whether life-cycle stage has an impact on ethnic residential locational choices. Due to a serious concern about the length of the questionnaire, the variables indicating life-cycle stage directly or indirectly in the questionnaire included only "age and marriage status" of the respondents, "general accessibility to other parts of the city", "pleasant neighborhood", "closeness to workplace" and "closeness to children's school". Questions on "age of the children" which may have helped more fully understand the impact of the life-cycle stage on residential locational choices, were neglected.

The questions about maintenance of ethnic identity mainly included questions about ethnic life-styles and social interaction. Questions about attitudes towards ethnic norms, such as "a son should live with his parents even after he is married", were not asked. In future research, such questions about attitudes towards ethnic norms should be added. Assimilation not only includes changes in behavior but also includes changes in attitudes and ideology and this aspect, although difficult to isolate and measure, should be examined in some detail in future work on assimilation.

6.3 Suggestions for Future Research

In addition to the above shortcomings requiring further examination, the following issues are also worthy of future research.

1. The present study examined ethnic maintenance of the first generation Chinese immigrants and found a strong ethnic identity persists among these people. Whether

or not this will continue in subsequent generations and how ethnic identity is perpetuated to in second and third generation Chinese needs further study in the future. This will require longitudinal approaches which may be difficult to implement given the reluctance on the part of the Chinese to respond to this survey.

2. In the present study, the relationship between ethnic residential segregation/dispersal and maintenance of ethnic identity was examined. We drew the conclusion that ethnic residential dispersal does not necessarily prevent people from maintaining their ethnic identity. However, we do not know whether people living dispersed are more "assimilated" than the people living clustered in terms of "using English media", "attitudes towards western value system" and "social interaction with non-Chinese". "Assimilation" and "maintenance of ethnic identity" are like two sides of the same coin. Both are important for understanding theories of ethnic relations. Future research conducted on the Chinese "assimilation" pattern should endeavor to establish how the Chinese adopt to the majority culture while keeping their own culture and identity. This kind of research will provide a full knowledge of the general process of how immigrants adapt to the host society. The same type of study should also be conducted with other ethnic groups.

3. The findings of the present study raised the question that if ethnic residential dispersal does not necessarily cause people to loose their ethnic identity, why some groups, such as the Jews, choose to live highly clustered together in the suburbs in order to maintain their ethnic identity? Ethnic religion has been suggested tentatively as a factor for this voluntary type of suburban segregation (Driedger,

1989; Agócs, 1981). Further study should be undertaken to establish the factors that shape suburban ethnic residential patterns.

4. In Figure 2.3 we showed the presence of localized concentrations of Chinese households in several Edmonton peripheral suburbs, namely Millwoods and Castle Downs. The tendency towards spatial propinquity with friends/relatives was not found within this outer-suburban group. The same results were also found for South Asians in Edmonton (Khatun, 1984). The reasons for this peripheral concentration are not clear. From our findings it might tentatively be suggested that the "aspiration for a new house" is the reason for the peripheral concentration of Chinese immigrants. Research should be conducted in this area in the future.

Bibliography

Agócs, C. 1981. Ethnic Settlement in a Metropolitan Area: A Typology of Communities. *Ethnicity*, 8:127-48.

Alberta Municipal Affairs 1977. *The Hamlet of Sherwood Park: A Review of Alternative Forms of Government*. Edmonton, Alberta: Alberta Municipal Affairs, Special Projects and Policy Research.

Anderson, A. B. and Frideres, J. S. 1981. *Ethnicity in Canada: Theoretical Perspectives*. Toronto: Butterworths & Co Ltd.

Balakrishnan, T.R. 1982. Changing Patterns of Ethnic Residential Segregation in the Metropolitan Areas of Canada. *Canadian Review of Sociology and Anthropology*, 19:92-110.

-----1976. Ethnic Residential Segregation in the Metropolitan Areas of Canada. *Canadian Journal of Sociology*, 1:481-98.

Baureiss, G. 1987. Chinese Immigration, Chinese Stereotypes and Chinese Labour. *Canadian Ethnic Studies*, 19:15-34.

Becker, T. 1968. Patterns of Attitudinal Changes among Foreign Students. *American Journal of Sociology*, 73:431-42.

Berry, B. 1958. *Race and Ethnic Relations*. Boston: Houghton-Mifflin.

Berry, J.W., Kalin, R. and Taylor, D.M. 1977. *Multiculturalism and Ethnic Attitudes in Canada*. Ottawa: Minister of Supply and Services.

Bleda, S. E. 1979. Socioeconomic, Demographic and Cultural Bases of Ethnic Residential Segregation. *Ethnicity*, 6:147-67.

-----1978. Intergenerational Differences in Patterns and Bases of Ethnic Residential Dissimilarity. *Ethnicity*, 5:91-107.

Breton, R. 1964. Institutional Completeness of Ethnic Communities and the Personal Relations of Immigrants. *American Journal of Sociology*, 70:193-205.

Chan, A. B. 1983. *Gold Mountain*. Vancouver: New Star Books.

City of Edmonton 1978(a). *The Future of Chinatown, Downtown Plan Working Paper No.1*. Edmonton: Area Planning Section, Planning Department, City of Edmonton.

-----1978 (b). *Boyle Street and McCauley Plan: Planning Issues and Objectives Working Paper No.2*, Edmonton: Area Planning Section, Planning Department, City of Edmonton.

Cressey, P.F. 1938. Population Succession in Chicago 1898-1930. In Peach, C., editor, *Urban Social Segregation*, pages 87-95. New York: Longman Group Ltd.

Cuber, J.F. 1955. *Sociology: A Synopsis of Principles*. New York: Appleton-Century Crofts.

Darroch, A. G. and Marston, W. G. 1972. The Social Class Basis of Ethnic Residential Segregation: The Canadian Case. *American Journal of Sociology*, 77:491-50.

-----1969. Ethnic Differentiation: Ecological Aspects of a Multidimensional Concept. *International Migration Review*, 4:71-95.

Dashefsky, A., editor 1976. *Ethnic Identity in Society*. Chicago: Rand McNally.

Dixon, C and Leach, B. 1976. *Sampling Methods for Geographical Research*. London, U.K.: Concepts and Techniques in Modern Geography No.17. Institute of British Geographers.

Driedger, L. 1989. *The Ethnic Factor: Identity in Diversity.* Toronto: McGraw-Hill Ryerson Ltd.

-----1977. Toward a Perspective on Canadian Pluralism: Ethnic Identity in Winnipeg. *The Canadian Journal of Sociology*, 2:77-95.

-----1975. In Search of Cultural Identity Factors: A Comparison of Ethnic Minority Students in Manitoba. *Canadian Review of Sociology and Anthropology*, 12:150-62.

Driedger, L. and Church, G. 1974. Residential Segregation and Institutional Completeness: A Comparison of Ethnic Minorities. *Canadian Review of Sociology and Anthropology*, 11:30-52.

Driedger, L. and Peters, J. 1977. Identity and Social Distance: Towards Understanding Simmel's The Stranger'. *Canadian Review of Sociology and Anthropology*, 14:158-73.

Duncan O. and Duncan, B. 1955. A Methodological Analysis of Segregation Indices. *American Sociological Review*, 2:210-17.

Duncan, O.D. and Lieberson, S. 1959. Ethnic Segregation and Assimilation. In Peach, C., editor, *Urban Social Segregation*, pages 96-121. New York: Longman Group Ltd.

Economic Council of Canada 1991. *New Faces in the Crowd: Economic and Social Impacts of Immigration*. Ottawa: Minister of Supply and Services Canada.

Employment and Immigration Canada 1985-1991. *Immigration Statistics*. Ottawa: Immigration Canada.

-----1989. *Immigration to Canada, a Statistical Overview*. Ottawa: Employment and

Immigration Canada.

Etzioni, A. 1959. The Ghetto---A Re-Evaluation. *Social Forces*, 37:225-62.

Fairbairn, K. J. and Khatun H. 1989. Residential Segregation and the Intra-Urban Migration of South Asians in Edmonton. *Canadian Ethnic Studies*, 21:45-64.

Farley, R. 1970. The Changing Distribution of Negroes Within Metropolitan Areas: The Emergence of Black Suburbs. *The American Journal of Sociology*, 75:512-29.

Firey, W. 1945. Sentiment and Symbolism As Ecological Variables. *The American Sociological Review*, 10:140-48.

Fleras, A. and Elliott, J. L. 1992. *Multiculturalism in Canada.* Ontario: Nelson Canada.

Frideres, J.S.. 1978. British Canadian Attitudes Toward Minority Ethnic Groups in Canada. *Ethnicity*, 5:20-32.

Gahr, G.A. 1979. *Sherwood Park: Residents's Attitudes Toward a Dormitory Satellite of Edmonton*. Unpublished M.A. Thesis, Department of Geography, University of Alberta.

Gist, N. P. and Fava, S. F. 1974. *Urban Society*. New York: Thomasy,Crowell Company, Inc.

Glazer, N. and Moynihan D. P. 1963. *Beyond the Melting Pot*. Cambridge, Massachusettes: MIT press.

Glebe, G. 1986. Segregation and Intra-Urban Mobility of a High-Status Ethnic Group: The Case of the Japanese in Dusseldorf. *Ethnic and Racial Studies*, 9:461-83.

Golant, S. M. and Jacobsen, C. W. 1978. Factors Underlying the Decentralized Residential Locations of Chicago's Ethnic Population. *Ethnicity*, 5:379-97.

Gordon, M. M. 1964. *Assimilation in American Life.* New York: Oxford University Press.

Grimble, L.G. and Associates 1976. *St. Albert Area Transportation Study*. Edmonton, Alberta: L.G. Grimble and Associates Ltd.

Guest, A.M. and Weed, J.A.. 1976. Ethnic Residential Segregation: Patterns of Change. *American Journal of Sociology*, 81:1088-111.

Guy, R. F., Edgley, C.E., Arafat, I., and Allen, D.E. 1987. *Social Research Methods: Puzzles and Solutions*. Boston: Allyn and Bacon, Inc..

Hanowski, A., Hayward, E.E., Reed C, and Teather, E.C. 1962. *Housing for the Aged: An Exploratory Study of Needs and Preferences*. Unpublished Master's thesis, School of Social Work, University of British Columbia.

Henry, G. T. 1990. *Practical Sampling*. Newbury Park, California: Sage Publications, Inc..

Herberg, E. N.. 1989. *Ethnic Groups in Canada: Adaptions and Transitions*. Ontario: Nelson Canada.

Himmelfarb, H. S. 1980. Patterns of Assimilation-Identification Among American Jews. *Ethnicity*, 6:249-67.

Hoyt, D. R. and Babchuk, N. 1981. Ethnicity and the Voluntary Associations of the Aged. *Ethnicity*, 8:67-81.

Hurh, W. M., Kim, H. C. and Kim, K. C. 1978. *Assimilation Patterns of Immigrants in the United States: A Case Study of Korean Immigrants in the Chicago Area*. Chicago: University Press of America.

Isajiw, W. W. 1978. Olga in Wonderland: Ethnicity in a Technological Society. In Driedger,L., editor, *The Canadian Ethnic Mosaic*, pages 29-39. Toronto: McClelland & Stewart.

-----1970. Definitions of Ethnicity. In Goldstein, J.E. and Bienvenue,R. M.,editors, *Ethnicity and Ethnic Relations in Canada: A Book of Readings*, pages9-25. Toronto: Butterworth & Co. Ltd.

Jaret, C. 1979. Recent Patterns of Chicago Jewish Residential Mobility. *Ethnicity*, 5:235-48.

Jiobu, R. M. 1988. *Ethnicity and Assimilation: Blacks, Chinese, Filipinos, Japanese, Koreans, Mexicans, Vietnamese and Whites*. Alberny: State University of New York Press.

Johnson, G. E. 1992. Ethnic and Racial Communities in Canada and Problems of Adaption: Chinese Canadians in the Contemporary Period. *Ethnic Groups*, 9:151-74.

Kantrowitz, N. 1981. Ethnic Segregation: Social Reality and Academic Myth in Peach, C. and Smith, S., editors, *Ethnic Segregation in Cities*, pages 43-61. London: Croom Helm Ltd.

-----1973. *Ethnic and Racial Segregation in New York Metropolis*. New York: Praeger.

Khatun, H. 1984. *Intra-Urban Residential Migration of East Indian People in Edmonton*. Unpublished M.A. thesis. Department of Geography, University of Alberta.

Lai, D. C. 1988. *Chinatowns: Towns Within Cities in Canada*. Vancouver: University of British columbia Press.

Lai, V. 1972. The New Chinese Immigrants in Toronto. In Elliott, J. L., editor, *Immigrant Groups*, pages 120-40. Scarborough, Ontario: Prentice-Hall of Canada Ltd.

Ley, D. 1983. *A Social Geography of the City*. New York: Harper & Row, Publishers, Inc.

Li, Peter S. 1990. *Race and Ethnic Relations in Canada*. Toronto: Oxford University Press.

-----1988. *The Chinese in Canada*. Toronto: Oxford University Press.

-----1987. The Economic Cost of Racism to Chinese-Canadians. *Canadian Ethnic studies*, 19:102-13.

-----1980. Immigration Laws and Family Patterns: Some Demographic Changes Among Chinese Families in Canada, 1885-1971. *Canadian Ethnic studies*, 12:58-73.

Lieberson, S. 1963. *Ethnic Patterns in American Cities*. New York: The Free Press of Glencoe.

-----1961. The Impact of Residential Segregation on Ethnic Assimilation. *Social Forces*, 40:52-7.

McCracken, K.W.J. 1973. *Patterns of Intra-Urban Migration in edmonton and the Residential Relocation Process*. Unpublished Ph.D thesis, Department of Geography, University of Alberta.

Matwijiw, P. 1979. Ethnicity and Urban Residence: Winnipeg:1941-1971. *Canadian Geographer*, 23:45-61.

Michelson, W. 1976. *Man and His Urban Environment: A Sociological Approach with Revisions*. Reading, Massachusetts: Addison-Wesley Publishing Company.

Murguía, E. 1975. *Assimilation, Colonialism and the Mexican American People*. Austin: The University of Texas at Austin Press.

Nann, R. C. 1970. *Urban Renewal and Relocation of Chinese Community Families.* Ottawa: the Citizenship Branch, Department of the Secretary of State.

Newman, W. M. 1978. Theoretical Perspectives for the Analysis of Social Pluralism. In Driedger, L.,editor, *The Canadian Ethnic Mosaic*, pages 40-54. Toronto: McClelland & Stewart.

-----1973. *American Pluralism: A Study of Minority Groups and Social Theory*. New York: Harper and Row Inc.

Norušis, M.J. 1991. *The SPSS Guide to Data Analysis for SPSS/PC+* 2nd edition. Chicago: SPSS Inc.

O'Bryan, K.G., Reitz Jeffrey G. and Kuplowska O. 1976. *Non-Official Languages: A Study in Canadian Multiculturalism*. Ottawa: Department of the Secretary of State.

Park, R. E. and Burgess, E.W. 1921. *Introduction to the Science of Socciology.* New York: Greenwoodd Press, Publishers.

Porter, J. 1965. *The Vertical Mosaic*. Toronto: University of Toronto Press.

Powers, M. G. 1978. Ethnic Concentration and Socioeconomic Status in Metropolitan Areas. In *Ethnicity*, 5:266-73.

Richmond, A. H. 1967. *Post-War Immigrants in Canada*. Toronto: University of Toronto Press.

Rodriguez, C. 1975. A Cost-Benefit Analysis of Subjective Factors Affecting Assimilation: Puerto Ricans. *Ethnicity*, 2:66-80.

Rose A. 1956. *Sociology: The Study of Human Relations*. New York: Knopf.

Rose, H. M. 1981. The Black Professional and Residential Segregation in the American City. In Peach, C., editor, *Ethnic Segregation in Cities*, pages 127-47. London: Croom Helm Ltd.

Rossi, P. H. 1980. *:Why Families Move*. Beverly Hills, California: Sage Publication Inc.

Rpgers, J. 1980. Different Faces From the Same Boat. *Maclean's*, 93(43):52-3.

Spence J.T., Cotton, J.W., Underwood, B.J. and Duncan C.P. 1990. *Elementary Statistics*, 5th edition. Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Sorenson, A, Taeuber, K.E. and Jollingsworth, L.J. Jr. 1975. Indexes of Rural residential Segregation for 109 Cities in the United States, 1940-1970. *Sociological Focus*, 8:125-42.

Sprinthall, R.C. 1987. *Basic Statistical Analysis*, 2nd edition. Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Statistics Canada 1993. *The Daily*. Statistics Canada, Catalogue 11-001E. Tuesday, March 2, 1993.

------1991. *Census of Canada*. Catalogue 93-315. Ottawa: Minister of Supply and Services.

------1986. *Census of Canada*. Catalogue 95-107, 95-108, 93-154, CD-ROM. Ottawa: Minister of Supply and Services.

Taeuber, K. E. and Taeuber A. 1964. The Negro as an Immigrant Group in Peach, C., editor, *Urban Social Segregation*, pages 122-34. New York: Longman Group Ltd.

Tan, J. 1987. Chinese labour and the Reconstituted Social Order of British Columbia. *Canadian Ethnic Studies*, 19:68-88.

Thompson, R. H.. 1979. Ethnicity Versus Class: An Analysis of Conflict in a North American Chinese Community. *Ethnicity*, 6:306-26.

Timms D. 1965. Quantitative Techniques in Urban Social Geography in Chorley, R. and Haggett, P., editors, *Frontiers in Geographical Teaching*, pages 239-65. London: Methuen.

Uyeki, E. 1980. Ethnic and Race Segregation, Cleveland, 1910-1970. *Ethnicity*, 7:390-403.

Ward, D. 1982. The Ethnic Ghetto in the United States: Past and Present. *Transaction, Institute of British Geographers*, 7:257-75.

Warner, W. L. and Srole, L. 1945. *The Social Systems of American Ethnic Groups*. New Haven: Yale University Press.

Waterman, S. and Kosmin, B.A. 1988. Residential Patterns and Processes: A Study of Jews in Three London Boroughs. *Transactions of the Institute of British Geographers*, 13:79-95.

Webber, M. 1963. Order in Diversity: Community without Proqinquity. In Wingo, L. editor, *Cities andd Space: The Future Uses of Urban Land*, pages 23-54. Baltimore, MD: Johns Hopkins Press.

Wickberg, E. editor 1982. *From China to Canada: A History of the Chinese Communities in Canada*. Toronto: McClelland & Stewart.

Yinger, J. M. 1981. Toward a theory of assimilation and dissimilation. *Ethnic and Racial Studies*, 4:249-64.

Appendix A Codebook of Variables Used for χ^2 Test in Data Analysis

Variable Name	Description of the Variable	Original Coding Scheme	Recoding Scheme
Agecome	How old were you when you arrived in Canada?	1=0-4 years 2=5-9 years 3=10-14 years 4=15-19 years 5=40-49 years 6=50-59 years 7=60-69 years 8=70 years and over	1=0-14 years 2=15-29 years 3=30-49 years 4=50 years and over
Agenow	How old are you now?	1=20-24 years 2=25-29 years 3=30-34 years 4=35-39 years 5=40-49 years 6=50-59 years 7=60-69 years 8=70 years and over	1=20-34 years 2=35-59 years 3=60 years and over
Attituca	Please indicate your attitudes towards the statement "Canadians are generally friendly".	1=strongly agree 2=agree 3=somewhere in between 4=disagree 5=strongly disagree	1=strongly agree or agree 2=somewhere in in between 3=disagree or strongly disagree
Chholida	Does your family celebrate any Chinese holidays?	1=yes 2=no	No Recoding
Chilsay	In which language(s) do the parents speak to the children in your family?	1=English only 2=Englsih mainly 3=English and Chinese 4=Chinese mainly 5=Chinese only	1=English only or mainly 2=English and Chinese 3=Chinese mainly or only
Chmember	Are you a member of any voluntary Chinese organizations?	1=yes 2=no	No Recoding

Variable Name	Description of the Variable	Original Coding Scheme	Recoding Scheme
Chngame	Do you play any popular Chinese games?	1 = frequently 2 = occasionally 3 = rarely 4 = never	1 = frequently or occasionally 2 = rarely or never
Chnread	How well do you read Chinese?	1 = fluently 2 = pretty well 3 = enough to get by 4 = not at all	1 = fluently or pretty well 2 = enough to get by or not at all
Chnsay	How well do you speak Chinese?	1 = fluently 2 = pretty well 3 = enough to be understood by others 4 = not at all	1 = fluently or pretty well 2 = enough to be understood by others or not at all
Chnschol	How many years of Chinese schooling did you finish?	1 = none 2 = 1-5 years 3 = 6-10 years 4 = 11 years and over	1 = 0-5 years 2 = 6-10 years 3 = 11 years and over
Chnwrite	How well do you write Chinese?	1 = fluently 2 = pretty well 3 = enough to be understood by others 4 = not at all all	1 = fluently or pretty well 2 = enough to be understood by others or not at
Educastu	Indicate your education status (no matter English or Chinese)	1 = completed university or college 2 = some university or college 3 = completed high school 4 = some high school 5 = elementary	1 = completed or some university or college 2 = completed or some high school 3 = elementary
Employ	Indicate your employment status	1 = employed 2 = unemployed 3 = retired	No Recoding

Variable Name	Description of the Variable	Original Coding Scheme	Recoding Scheme
Engread	How well do you read English?	1=fluently 2=pretty well 3=enough to get by 4=not at all	1=fluently or pretty well 2=enough to get by or not at all
Engsay	How well do you speak English?	1=fluently 2=pretty well 3=enough to be understood by others 4=not at all	1=fluently or pretty well 2=enough to be unstood by others or not at all
Engschol	How many years of English schooling did you finish?	1=none 2=1-5 years 3=6-10 years 4=11 years and over	1=none 2=6-10 years 3=11 years and over
Engwrite	How well do write English?	1=fluently 2=pretty well 3=enough to be understood by others 4=not at all	1=fluently or pretty well 2=enough to be understood by others or not at all
Frebooks	How often do you read Chinese books/magazines?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never
Frepaper	How often do you read Chinese newspapers?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never
Freparti	How often do you participate in activities of your organizations?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never

Variable Name	Description of the Variable	Original Coding Scheme	Recoding Scheme
Freradio	How often do you listen to Chinese radio programs?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never
FreTV	How often do you watch Chinese TV programs?	1=every day 2=frequently 3=occasionally 4=rarely 5=never	1=everyday or frequently or occasionally 2=rarely or never
Frevideo	How often do you borrow/rent/purchase Chinese videos?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never
Frevisit	How often do you visit your homeland?	1=frequently 2=occasionally 3=rarely 4=never	1=frequently or occasionally 2=rarely or never
Friend	Are your closet friends (to whom you would like to tell your personal problems) Chinese or Nno-Chinese?	1=all Non-Chinese 2=mainly non-Chinese 3=each about equal 4=mainly Chinese 5=all Chinese	1=all or mainly Non-Chinese 2=each about equal 3=mainly or all Chinese
Income	Indicate the approximate income of your household (include all sources).	1=under $10,000 2=$10,000-24,999 3=$25,000-49,999 4=$50,000 and over	1=under $10,000 2=$10,000-$49,999 3=$50,000 and over
Lenstay	How long have you been staying in Canada?	1=1-4 years 2=5-9 years 3=10-14 years 4=15-19 years 5=20-29 years 6=30 years and over	1=1-9 years 2=10-19 years 3=20 years and over

Variable Name	Description of the Variable	Original Coding Scheme	Recoding Scheme
Marriage	Indicate your marriage status.	1 = single 2 = married (including separared) 3 = divorced 4 = widowed	No Recoding
Relahas	Do you still have relatives in either China or Hong Kong or both?	1 = yes 2 = no	No Recoding
Spouori	Is your spouse of Chinese origin?	1 = yes 2 = no 3 = mixture	No Recoding
Spousay	In which language(s) do you speak to your spouse?	1 = English only 2 = Englsih mainly 3 = English and Chinese 4 = Chinese mainly 5 = Chinese only	1 = English only or mainly 2 = English and Chinese 3 = Chinese mainly or only
Westfood	How often does your family eat western food at home?	1 = every meal 2 = once a day 3 = frequently 4 = occasionally 5 = rarely	1 = every meal or once a day or frequently 2 = occasionally or rarely

Appendix B. The Survey Questionnaire (English Version)

(ALL QUESTIONS TO BE ANSWERED BY THE MAJOR WAGE EARNER)

I. Questions About Your Daily Behavior And Social Life

The first group of questions in this section are about the language or languages you use daily. Please tick (✓) only ONE answer to each question.

1. How well do you speak Chinese?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to be understood by others
   - ☐ Not at all

2. How well do you read Chinese?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to get by
   - ☐ Not at all

3. How well do you write Chinese?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to be understood by others
   - ☐ Not at all

4. How well do you speak English?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to be understood by others
   - ☐ Not at all

5. How well do you read English?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to get by
   - ☐ Not at all

6. How well do you write English?
   - ☐ Fluently
   - ☐ Pretty well
   - ☐ Enough to be understood by others
   - ☐ Not at all

7. In which language(s) do you speak to your spouse? (If you do not have a spouse, please go to Question 9)
[ ] English only
[ ] English mainly
[ ] English and Chinese
[ ] Chinese mainly
[ ] Chinese only

8. In which language(s) do the parents speak to the children in your family? (If you do not have children, please go to Question 9)
[ ] English only
[ ] English mainly
[ ] English and Chinese
[ ] Chinese mainly
[ ] Chinese only

9. How many years of Chinese schooling did you finish? Please specify number of years.

____________year(s)

10. How many years of English schooling did you finish? Please specify number of years. (**Note**: Please do not include those years in which English was taught as a foreign language.)

____________year(s)

Now I would like you to answer a couple of questions about the food you eat and the stores you use.

11. How often does your family eat Western food at home?
[ ] Every meal
[ ] Once a day
[ ] Frequently
[ ] Occasionally
[ ] Rarely

12. Where does your family buy Chinese food and groceries? (**Note**: for this questionnaire, Chinatown is defined as the block area bounded by 97 Street on the west, 95 Street on the east, Jasper Avenue to the south, and 107 Avenue to the north).

[ ] In Chinatown only
[ ] In Chinatown mainly
[ ] Equally in Chinatown or outside Chinatown
[ ] Outside Chinatown mainly
[ ] Outside Chinatown only
[ ] Never

Questions 13---17 deal with your participation in the Chinese community and your connections with your homeland.

13. Does your family celebrate any Chinese holidays (such as Chinese New Year) in any form (such as going out for dinner or Karaoke, inviting friends home, making big feasts, taking part in the activities organized by various Chinese organizations)?

[ ] Yes [ ] No

14. Do you play any popular Chinese games (such as Mahjong)?

[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

15. Are you a member of any voluntary Chinese organizations (such as clan, locality, religious, political or entertainment associations)?

[ ] Yes [ ] No (Please go to Question 16)

How often do you participate in activities of your organization(s)?

[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

16. Do you still have relatives in either China or Hong Kong or both?

[ ] Yes [ ] No (Please go to Question 17)

How often are you in contact with them?

[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

17. How often do you visit China or Hong Kong?

[ ] More than once a year
[ ] Once a year
[ ] Occasionally
[ ] Rarely
[ ] Never

Questions 18---22 deal with your use of the Chinese media in Edmonton.

18. How often do you read Chinese language newspapers?

[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

19. How often do you read Chinese language magazines/books?
[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

20. Do you listen to any Chinese radio programs?
[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

21. Do you watch Chinese language programs on TV?
[ ] Everyday
[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

22. Do you borrow/rent/purchase any Chinese language videos?
[ ] Frequently
[ ] Occasionally
[ ] Rarely
[ ] Never

Questions 23---24 ask you about your social participation.

23. Are your closest friends (to whom you would like to tell your personal problems) Chinese or Non-Chinese?
[ ] Non-Chinese
[ ] Mainly non-Chinese
[ ] Each about equal numbers
[ ] Mainly Chinese
[ ] All Chinese

24. Please indicate (✓) the space which corresponds to your attitude towards the statement **"Canadians are generally friendly"**.

strongly agree	☐	☐	☐	☐	☐	strongly disagree

Questions 25--27 are about your Employment.

25. Your employment status is
[ ] Employed (Please go to the next question)
[ ] Unemployed (Please go to
[ ] Retired Section II---**Questions About Residence**)

26. Are you self-employed?
[ ] Yes
[ ] No

26(a). Customers of you or your company are
[ ] Mainly Chinese
[ ] Chinese & Non-Chinese (each about equal)
[ ] Mainly Non-Chinese

26(b). What kind of business do you provide? Please specify.

26(c). Owner of your company or your employer is
[ ] Chinese
[ ] Non-Chinese

26(d). Other employees are
[ ] Chinese
[ ] Non-Chinese
[ ] Both

26(e). Customers of your company are (if applicable)
[ ] Mainly Chinese
[ ] Chinese & Non-Chinese (each about equal)
[ ] Mainly Non-Chinese

27. The location of your employment is (Please give the intersection of the avenue/street nearest to where you work).
__________Avenue/__________Street

II. Questions About Residence

1. How many times have you changed your address in Edmonton?
[ ] Once
[ ] Twice
[ ] Three times
[ ] More than three times

2. Please give details about your present and your last two dwelling places in Edmonton (Start with the present one)

	Area	Type* (H/A/C/T/O)	Tenure (owned/rented)
Present	___ave/___st		
Previous	___ave/___st		
The One before Previous one	___ave/___st		

* H = Single Detached Home
A = Apartment
C = Condominium
T = Townhouse
O = Others

3. There are a number of factors which determine why you live in the place where you live now. How important are each of the following to you (Circle one number for each factor).

	Of Great Importance		Of Some Importance		Of No importance
It has enough living space	1	2	3	4	5
We can afford the rent/mortgage	1	2	3	4	5
It has easy access to other parts of the city	1	2	3	4	5
It is close to work	1	2	3	4	5
It is close to the children's school	1	2	3	4	5
It is near friends and/or relatives	1	2	3	4	5
It is in a pleasant neighborhood	1	2	3	4	5
Other(s). Please specify____________________					

III. Personal Information

1. How old were you when you arrived in Canada? Please specify.

__________years of age

2. How old are you now? Please specify.

__________years of age

3. Which country did you last reside in before coming to Canada? Please specify.

Country________________

4. Your immigration status is
[ ] Permanent Resident
[ ] Citizen
[ ] Other

5. What is your sex?
[ ] Male [ ] Female

6. Marriage status
[ ] Single [ ] Married [ ] Divorced
[ ] Widowed

7. Is your spouse of Chinese origin? (If you do not have a spouse, Please go to Question 8).
[ ] Yes [ ] No [ ] Mixture

8. Number of children you have
[ ] none [ ] 1 [ ] 2
[ ] 3 [ ] 4 and over

9. Your education status (No matter whether English or Chinese)
[ ] Completed University or College
[ ] Some University or College
[ ] Completed high school
[ ] Some high school
[ ] Elementary

10.The approximate income of your household (Please include all sources)
[ ] Under $10,000
[ ] $10,000--24,999
[ ] $25,000--49,999
[ ] $50,000 and over

Many thanks for your help!
Remember, do not sign your name.

Appendix A The Survey Questionnaire (Chinese Version)

(請家庭中的主要收入者囬答所有問題)

1. 有關日常生活及社會生活的問題

第一組問題是有關語言基礎及語言使用。每個問題祇有唯一答案，請對該答案打勾(✓)。

1 您說中文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能被別人聽懂和理解
[ ]一點不會說

2 您讀中文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能基本理解大意
[ ]一點不會讀

3 您寫中文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能被別人讀懂和理解
[ ]一點不會寫

4 您說英文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能被別人聽懂和理解
[ ]一點不會說

5 您讀英文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能基本理解大意
[ ]一點不會讀

6 您寫英文的程度如何？
[ ]很流利
[ ]相當不錯
[ ]能被別人讀懂和理解
[ ]一點不會寫

７ 您同配偶用哪種語言交談？（如果您無配偶，請轉到第九題）
□ 衹用英文
□ 主要用英文
□ 英文同中文有差不多使用機會
□ 主要用中文
□ 衹用中文

８ 您同子女用哪種語言交談？（如果您無子女，請轉到第九題）
□ 衹用英文
□ 主要用英文
□ 英文同中文有差不多使用機會
□ 主要用中文
□ 衹用中文

９ 您上過多少年中文學校？ 請指明年數。
________ 年

１０ 您上過多少年英文學校？ 請指明年數。
________ 年

現在請您回答一組有關飲食及購物習慣的問題。

１１ 您家多長時間喫一次西餐？
□ 每餐都是西餐
□ 每天有一頓是西餐
□ 經常喫
□ 偶爾喫一下
□ 很少或從不喫西餐

１２ 您家通常在哪里采購中國食品及雜貨？
（中國城在本文中被定義爲東至９５街，西至９７街，南至 Jasper街，北至１０７街間的街區）
□ 衹在中國城
□ 主要在中國城
□ 在中國城内及城市其它地區采購的機會差不多
□ 主要在中國城以外的地區
□ 從不采購中國食品及雜貨

問題１３至１７是有關您參加中國社區活動及與家鄉聯系的情況。

１３ 您的家庭是否以任何形式（比如外出赴宴或去卡拉ｏｋ，邀請朋友來家，做豐盛的晚餐，參加中國組織的活動等）來慶祝一些中國節日（比如農曆新年，元宵節，中秋節等）
□ 是的　　□ 不是

１４您參加任何中國式的娛樂活動嗎（比如說麻將）？
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

１５您是否是一些自發性的中國社團或組織的成員？（比如同鄉會，宗親會，教會及娛樂組織等）
［ ］是的　　［ ］不是

您多長時間參加一次您所在社團或組織的活動？
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

１６您是否還有親戚在中國或香港？
［ ］是的　　［ ］沒有（請轉到第十七題）

您多長時間與他們聯系一次？
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

１７您多長時間訪問一次中國或香港？
［ ］一年兩次或兩次以上
［ ］一年一次
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

問題１８至２２是有關您使用中文傳播媒介的問題。

１８您多長時間閱讀一次中文報紙？
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

１９您多長時間閱讀一次中文雜志書刊？
［ ］很經常
［ ］有時
［ ］極少
［ ］從不

20您收聽任何中文廣播嗎？
- □很經常
- □有時
- □極少
- □從不

21您收看電視上的中文節目嗎？
- □每天
- □很經常
- □有時
- □極少
- □從不

22您是否借／租／購買一些中文錄像帶？
- □很經常
- □有時
- □極少
- □從不

問題23至24是有關您的社交活動及傾嚮。

23您最親近的朋友（您愿嚮其傾訴私人生活中的問題的朋友）是中國人還是外國人？
- □全部是非中國人
- □主要是非中國人
- □中國人和非中國人的數量差不多
- □主要是中國人
- □全部是中國人

24請在下面這個尺度的空間上把您對"加拿大人總體來講很友好"這句話的態度打勾（√）。

強烈同意 □□□□□ 強烈不同意

問題25至27是有關您的工作的情況。

25您的工作的情況是
- □工作
- □失業　（請轉到下一個部分－－有關居住的問題）
- □退休

2 6您是自己開業嗎？
[ ]是的
[ ]不是

2 6(A) 您的顧客或您公司的顧客來源
[ ]主要爲中國人
[ ]中國人和非中國人差不多數量
[ ]主要爲非中國人

2 6(B) 您主要做什么生意或提供什么服務？ 請指明。

____

2 6(C) 您的僱主或公司老板是
[ ]中國人
[ ]非中國人

2 6(D) 公司的其他僱員是
[ ]中國人
[ ]非中國人
[ ]中國人和非中國人都

2 6(E)公司的顧客來源是（如果您是在公司工作的話）
[ ]主要是中國人
[ ]中國人和非中國人差不多
[ ]主要是非中國人

2 7請指明距您工作地點最近的交叉路口

_________街(ST) ___________道(Ave)

I I 有關居住的問題

1您在埃德蒙頓共換過幾次住址？
[ ]從未換過
[ ]一次
[ ]兩次
[ ]三次
[ ]四次以上（包括四次）

2請給出您在埃德蒙頓現在和上兩個住所的情況（從現在的開始）

	地區 (__St__Ave)	類型* (H/A/C/T/D)	房屋占有權情況（擁有／租借）
現在	___街___道		
上一個	___街___道		
再上一個	___街___道		

* H=獨立式房屋 (Single Detached Home)
A=公寓 (栢文, Apartment)
C=標準單元 (Condominium)
T=復式居屋 (Townhouse)
O=其它

3有相當一些原因決定了您住在現在所住的地方。下面的每一個原因對您的重要程度如何？ （請在您所選擇的數碼上劃圈）

	很重要		比較重要		不重要
現在的居所有足够的空間	1	2	3	4	5
現在的居所的房租或房屋抵押在經濟承受能力之内	1	2	3	4	5
從現在的居所去城市其它地方交通方便	1	2	3	4	5
現在的居所離上班的地方近	1	2	3	4	5
現在的居所離孩子的學校近	1	2	3	4	5
現在的居所離朋友或親戚的住處近	1	2	3	4	5
現在的居所在一個環境良好的居住區内	1	2	3	4	5

其它，請指出。______________________________

III有關個人的情況

1請指明您來加拿大時的年齡

__________歲

2請指明您現在的年齡

__________歲

3請指明您來加拿大前的最後一個永久居住的國家

____

4您的移民狀況
- □永久居住
- □加拿大公民
- □其它

5您的性別是
□男　　　　　　□女

6您的婚姻狀況
[ ]未婚
[ ]已婚
[ ]離婚
[ ]喪偶

7您的配偶是（如您無配偶，請轉到第八題）
[ ]中國血統
[ ]非中國人血統
[ ]混血兒

8您有多少個孩子？
[ ]没有孩子
[ ]一個
[ ]兩個
[ ]三個
[ ]四個或四個以上

9您受教育的情況（無論是中文或英文）
[ ]完成了大學或學院教育
[ ]受過一些大學或學院教育
[ ]完成了高中教育
[ ]上過一些高中
[ ]受過初等教育

１０您的家庭收入情況（請包括所有來源）
[ ]$10,000以下
[ ]$10,000--$24,999
[ ]$25,000-$49,999
[ ]$50,000以上

多謝您的合作！請您不要簽名！

Appendix D. The Covering Letter

May 1992

Dear Sir or Madam,

I am a graduate student studying Geography at the University of Alberta. As part of my graduate research, I am conducting a survey into the social and economic differences of the Chinese at different locations in Edmonton. The general purpose of this research is to find out if people living in different parts of the city behave differently and whether this has anything to do with the extent they have maintained the Chinese culture in adapting to the host society. So far very little is known about these issues and your information will be very important in helping understand them.

The information you give is fully confidential. No government agency is involved and the results will be reported in such a way that individual respondents can never be identified.

Please let the major wage earner in your family fill out the questionnaire. If you require further information regarding the questionnaire, please do not hesitate to contact me at 432-0951 or 492-5626. You can also contact my supervisor Dr.Fairbairn at 492-0343.

Thank you very much for your participation.

Sincerely,

Jane-Qing Fang